THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

MINISTRY OF AGRICULTURE

MINISTRY OF TRADE AND REGIONAL INTEGRATION

DE-RISKING, INCLUSION AND VALUE ENHANCEMENT OF PASTORAL ECONOMIES IN THE HORN OF AFRICA PROJECT

ENVIROMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

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ABBREVIATIONS AND ACRONYMS

CFP	Chance Finds Procedure
CSA	Central Statistics Agency
CSE	Conservation Strategy of Ethiopia
DRIVE	De-Risking Inclusion and Value Enhancement of Pastoral Economies Project
EDHS	Ethiopian Demographic and Health Survey
EHS	Environmental Health and Safety
EMP	Environmental Management Plan
EPE	Environmental Policy of Ethiopia
ESCP	Environment and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESRM	Environmental and Social Risk Management
ESS	Environmental and Social Standard
FDRE	Federal Democratic Republic of Ethiopia
GBV/SEA/SH	Gender Based Violence/Sexual Exploitation and Abuse/Sexual Harassment
GHGs	Green House Gases
GIIP	Good International Industry Practice
GPN	Good Practice Note
GRM	Grievance Redress Mechanism
GO	Government Organization
GoE	Government of Ethiopia
GPMP	Guidelines for Pest Management Plan
GREPP	Guidelines for Resource Efficiency and Pollution Prevention
HoA	Horn of Africa
IA	Implementing Agency
IO	Implementing Organization
IPM	Integrated Pest Management
LMP	Labour Management Procedure
MoA	Ministry of Agriculture
MoTRI	Ministry of Trade and Regional Integration
MoWIE	Ministry of Water Irrigation and Electricity
NWRMP	National Water Resources Management Policy
PAD	Project Appraisal Document
PIU	Project Implementation Unit
PMP	Pest Management Plan
RAP	Resettlement Action Plan
RDPS	Rural Development Policies and Strategies
RF	Resettlement Framework
SEP	Stakeholder Engagement Plan
SNNPR	Southern Nations, Nationalities and People's Region

TA	Technical Assistance
TRA	Training Needs Assessment
TESA	Targeted Environmental and Social Assessment
UCs	Underserved Communities
UCP	Underserved Communities' Plan
WaLRC	Water and Land Resource Center
WB	World Bank

EXECUTIVE SUMMARY

Project Background

De-Risking, Inclusion and Value Enhancement of Pastoral Economies Project (DRIVE) is part of the Horn of African Initiative through Investment Project Financing of the World Bank. The proposed project is regional, and will cover Ethiopia, Djibouti, Kenya and Somalia. The Government of Ethiopia (GoE) will conduct environmental and social impact assessment of the project to ensure that the project activities are environmentally and socially sound and sustainable. Thus, this Environmental and Social Management Framework (ESMF) focuses on the part of the project in Ethiopia.

Project Components

The project has two components. *Component 1* involves De-Risk and Financing. Through the activities under this component, the project supports access to financial service to the pastoralist production group. This will involve two major interventions: first, transfer pastoralists' drought risk to the insurance market and mobilize the capital of private (re)insurance companies on the total sum insured; and second, mobilize savings from pastoralists themselves that could be invested in other types of business, thus achieving income diversification and increasing their access to credit. *Component 2* concerns Livestock Value Chains and Trade Facilitation. This component intends to connect pastoralists better to markets through undertaking three subprojects: upgrading quality infrastructure; trade facilitation and trade logistics; and providing seed capital to attract private investment in the livestock value chains.

Project Target Areas

The DRIVE project targets two types of beneficiaries. The first group includes pastoralists or agro-pastoralists that live in the arid and semi-arid areas of the country, particularly in Somali, Afar, Oromia and SNNP regions. But the project will target pastoralists in groups who have the capacity to become productive. The second group targets private investors in the livestock value chains that can lead to higher incomes for pastoral producers.

The Rationale of the ESMF

The objective of this ESMF is to identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the relevant national and World Bank's Environmental and Social Framework (ESF).

Methodology

The preparation of the ESMF for the DRIVE project involved multiple methods such as Interview, Consultation and Desk reviews. Interview of 16 environmental and social experts and 8 top officials of relevant organizations (federal to woreda level) have been consulted through individual interview. *Community consultation*s were conducted in South Omo Zone Banna-Tsamy Woreda Mokach Kebele (26 participants), Borena Zone Harakalo Woreda Germedu Sirba Kebele (12 participants), Zone 1 Dubuti Woreda (14 participants). Desk review of project related documents and studies have been conducted with the objective to assess the national exiting legal and regulatory frameworks and Environment and social polices of World Bank.

Relevant National and World Bank's Legal Framework

Reviewed relevant national legal framework for the ESMF in this project includes: the Constitution of the Federal Democratic Republic of Ethiopia; Environmental Policy of Ethiopia (EPE); Conservation Strategy

of Ethiopia (CSE); National Water Resources Management Policy (NWRMP); Rural Development Policies and Strategies of Ethiopia (RDPSE); Pastoral Development Policies; and Ethiopian Labour Laws (ELLs). Relevant World Bank ESSs that apply to the project are: ESS1-8 and ESS10; Environmental, and Health and Safety (EHS) Guidelines.

Environmental and Social Baseline Conditions the Project Target Areas

The environmental and social baseline conditions show that pastoral areas in Ethiopia cover nearly two-third (61%) of the land mass of the country. Pastoral economy supports about 15% of the total population (14 million) of the country. The overwhelming majority (92%) of the pastoral communities in Ethiopia live in four regions, namely: Afar, Somali, and parts of Oromia and Southern Nations, Nationalities and People's Region (SNNPR). The most important pastoral groups in Ethiopia in terms of number of people, livestock and size of area occupied are the Somali in the east and southeast, the Afar in the northeast, the Borana and Guji in south Oromia and the 14 different pastoral groups in South Omo in SNNPR. Given the differential vulnerability associating with the historical, socio-economic and political inequalities, harsh living environment with limited natural resources and low productive means of livelihood that depends on communal access to natural resources, the GoE recognizes the pastoral communities in these areas as Underserved Communities (UCs).

Potential Positive Environmental and Social Impacts

Potential positive environmental impacts: The project supports the Green, Resilient and Inclusive Development (GRID). The GRID approach posits that poverty and climate change are interrelated and need to be addressed simultaneously and systematically. The risk finance component leverages digital and satellite technology to help pastoralists adapt to climate change which brings increased climatic uncertainty. Instead of relying on humanitarian assistance which arrives too late, pastoralists would receive insurance payouts at the onset of drought allowing them to purchase supplies to keep their animals alive. The entire Component 1 is expected to generate adaptation climate Co-Benefits. Component 2 will facilitate the carbon financing system.

Potential positive social impacts: The potential positive social impacts of the project include de-risk pastoral groups from drought risk with a package of financial services, awareness creation and financial literacy for the target pastoral groups, increased access to insurance alongside payment and saving account, and encourage pastoralists to build up savings to address moderate drought years and to invest in a drought index insurance product. In addition, expected positive impacts of the interventions are: the rationale of the potential economic benefits is based on the analysis of the sustainability and cumulative economic effect of the DRIVE project services; harmonization of standards and mutual recognition of conformity assessments for livestock production through enhanced quality infrastructure; promote the formal trade for the livestock sector in the project areas; increase the transportation logistics, processing facilities and efficiency in the livestock trade in the target project corridors in Ethiopia. Project interventions through both components pay special attention to women and promote gender equality.

Anticipated Environmental and Social Adverse Impacts and Risks

Environmental adverse impacts and risks: The overall potential environmental risk of the project is rated as substantial. *Pressure on local resource use*, the livestock value chains and trade facilitation component of the project will cause a significant use of local resources, particularly water and energy. Export-based animal fattening and milk production necessarily depends up on the use of large amount of freshwater. *Greenhouse Gas (GHG) emissions,* the DRIVE project involves investment in large-scale or

export market-based livestock production. This may lead to significant GHGs emissions. *Water pollution,* significant pollution of both surface and underground water sources is anticipated from poor manure management, direct discharge, and runoff from large-scale commercial-based livestock production. Significant *air pollution* and *waste generation* (liquid, solid and hazardous wastes) are expected due to the same pollutants. *Pest use,* the implementation of all the three subprojects under Component 2 involves the use of pests for various purposes with significant potential human health and environmental risks and impacts due to poor past management. *Risks and impacts on habitats and biodiversity,* project-related land acquisition and use in activities operation may cause habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading and changes in ecosystem services.

Community Health and Safety (CHS) risks and adverse impacts: In association with the project activities, equipment, and infrastructure, significant CHS risks and adverse impacts can be anticipated from different perspectives: increased traffic and road safety risks due to facilitation of transportation logistics; risks of communicable diseases from project workers to local communities; and community health risks from exposure to environmental pollution (e.g., hazardous chemicals and wastes).

S*ocial risks and adverse impacts:* The ESMF assess the overall significant potential social risks and adverse impacts both from the activities in Component 1 and Component 2. *Potential labour risks,* owing to the wide-ranging employment opportunities and huge labour requirement of the project, the risks of child labour and underage employment, labour influx, human trafficking and Occupational Health and Safety (OHS) are expected. *Involuntary resettlement,* both involuntary physical and economic displacement are expected due to project-related land acquisition and restriction on land use. *Differential risks for UCs,* due to their collective identity and attachment to land under traditional ownership and undesired contact and conflict of cultural norms between remote pastoral communities and massive migrant workers.

Proposed Environmental and Social Risks Mitigation Measure

Owing to the aforesaid anticipated environmental and social risks and adverse impacts, the ESMF proposes the undertaking of rigorous screening to determine the nature and scale of the anticipated E&S risks and impacts. Accordingly, the design of proper plans should be designed and implemented. Specifically, to manage the anticipated environmental and social risks and adverse impacts, the ESMF proposes the preparation of Labour Management Procedure, Pest Management Plan (PMP), Resource Efficiency and Pollution Prevention Plan (REPP), Resettlement Action Plan (RAP), Underserved Communities' Plan (UCP), Stakeholder Engagement Plan (SEP), Gender Action Plan (GAP), and Security Management Plan (SMP). The guidelines for the preparation of these ESRMPs are annexed to this ESMF.

Proposed Mitigation Measures

The proposed mitigation measures in the ESMF will apply a mitigation hierarchy. The mitigation hierarchy represents a systematic and sequenced approach to managing the potential environmental and social risks and adverse impacts of the project identified earlier. This involves the following mitigation steps: anticipation and avoidance, minimization, mitigation, and offset or compensation. For each identified environmental and social risk, a range of mitigation measures summarized in table 7 are included in this ESMF.

Monitoring and Implementation Support

The Implementing Agency (IA) the Ministry of Trade and Regional Integration (MoTRI) will hire and designate Environmental and Social Safeguards Specialists to monitor the performance of the project in accordance with the ESMP on an on-going basis. For ESMP with complex and high-level risks (e.g. RAP, UCP). The IA will retain competent professionals to monitor the implementation of the ESMP, design corrective actions as necessary, and provide advice on compliance with the ESSs. Yet, the Bank will monitor the environmental and social performance of the project in accordance with the requirements of the legal agreement reached with the IA including the ESCP and provide the necessary technical support for better achievement.

Implementation Arrangement

The ESMF proposes establishment of PIU and the hiring of full-time project personnel (Environmental Safeguards specialist, Social Safeguards Specialists, and Gender Specialists). To effectively implement the ESMF, it proposes the hiring of 24 project personnel: (a) 2 Senior Environmental and Social Safeguards specialist in the PIU which cooperate with the higher management at the MoA, line ministries,, respective Regional and Woreda Trade Offices, and local area project Environmental and Social Safeguards Specialists to coordinate the overall implementation of the ESMF; (b) Environmental and Social Safeguards and Gender Specialists that base the project office at the respective target regions but coordinate and oversee the implementation of the ESMF across the project areas in their respective region.

Grievance Redress Mechanism (GRM)

The ESMF provides project-level grievance mechanism, process, or procedure to receive and facilitate resolution of concerns and grievances of project-affected parties arising in connection with the project. Project's Environmental and Social Safeguards personnel in the project area are the lower-level of the GM structure. The next structure refers to the implementing organization in order of hierarchies (local, regional, and government). If the project-affected parties with the complaints not satisfied by the complaint responses of these GM structure, they can submit their complaints to the World Bank's Independent Inspection Panel to request an inspection to determine whether harm has occurred as a direct result of project performance's noncompliance with ESSs and procedures. Once all possible redress has been proposed and if the complainant is still not satisfied then the project-affected parties with the compliant will be advised of their right to the formal legal recourse.

1 PART ONE: INTRODUCTION

1.1 Country context

Pastoral areas in Ethiopia cover nearly two-third (61%) of the land mass of the country. Pastoral economy supports about 15% of the total population or about 14 million people. The overwhelming majority (92%) of the pastoral communities in Ethiopia live in four regions, namely: Afar, Somali, Oromia and the Southern Nations, Nationalities and People's (SNNP). The remaining (8%) live in Gambella, Benishangul and Tigray regions. Ethiopian pastoralists represent many different ethnic groups. The most important ones in terms of number of people, livestock and size of area occupied are the Somali in the east and southeast, the Afar in the northeast, and the Borana in the south part of the country comprising 53%, 29% and 10% of the pastoral population, respectively. Of the total livestock in the country, it is estimated that the pastoral sector raises 40% of the cattle, 75% of the goats, 25% of the sheep, 20% of the equines, and 100% of the camels.[1]

De-Risking, Inclusion and Value Enhancement of Pastoral Economies Project (DRIVE) is part of the Horn of African Initiative through Investment Project Financing of the World Bank (WB). The proposed project is regional, and will cover Ethiopia, Djibouti, Kenya and Somalia. This ESMF is for Component 2 activities to be implemented in Ethiopia.

1.2 Project development objective

The development objective of the DRIVE project is to de-risk pastoralists in the Horn of Africa including Ethiopia by: (i) protecting them against drought with enhanced financial access and risk transfer; and (ii) linking them to better markets through trade facilitation and the mobilization of private capital in the livestock value chains. Project development objective level indicators are:

- Number of pastoralists having access to drought insurance and financial services under the project (number), of which are female-headed households (percentage).
- Value of Private Capital Mobilized (PCM) by the project (the PCM in the results framework and data sheet reflects the capital at risk from private insurers, and the private investment mobilized from seed capital).
- Number of pastoral groups connected to markets.
- Number of trade facilitation measures supported by the project.

1.3 Project components

Component 1: Package of financial services for climate resilience: This Component will support the provision of an integrated package of financial services to build the climate resilience of pastoralists. Currently, due to the vulnerability of pastoralists to shocks and limited financial awareness, the number of pastoralists engaging with formal financial services is low and insufficient for vulnerable households to cope with major drought shocks without external support. DRIVE will support the delivery of a sustainable package of (i) savings for resilience, (ii) drought index-insurance, (iii) digital accounts and (iv) financial education and awareness creation. The Component will be implemented regionally by ZEP-RE,

[1] *Solomon Desta. (2020). Pastoralism and Development in Ethiopia. Economic Focus, 9 (3):12-20.*

the regional reinsurance entity of COMESA, owned by member countries which has been assessed as having the mandate and the capacity for this role. ZEP-RE will partner with the local private and financial sector to design and deliver the products. Savings will enable pastoralists to smooth their income and manage costs of moderate droughts, backed by insurance to provide timely payouts when severe droughts occur, and digital accounts to ensure quick and effective transactions. Over time more resilient pastoralists will be better placed to access credit to expand their productive capacity. DRIVE intends to develop the financial markets and systems for savings and risk finance, with a future phase to leverage and increase access to credit. ZEP-RE has developed an Environmental and Social Management System (ESMS) to manage potential environmental and social risks and impacts under Component 1.

Component 2. Livestock Value Chains and Trade Facilitation: This Component intends to better include pastoralists in the livestock value chains and facilitate trade. The pastoralist groups that benefit from Component 1 would be linked to investment opportunities under Component 2. The Component will support private investment in the livestock value chains so that pastoral producers can be linked to reliable markets and extract greater value addition from their livestock-rearing activities; the project will target pastoralist groups already formed. Activities will pay attention to animal welfare and will apply the 2014 IFC good practice note on Improving Animal Welfare in Livestock Operations.

The value chains supported will depend on each countries' priorities. The live animal value chain currently exporting to the Middle East is critical for Djibouti, Ethiopia, and Somalia, and supports trade in other commodities that sustain the livelihood of pastoralists. In Kenya and to some extent Ethiopia, the focus will be on value addition through livestock products (primarily red meat) and targeted markets will both be domestic and export. Rising domestic markets are an opportunity since moving from live animals to transformed product export may face resistance from importing countries and will require diversifying export markets beyond the Middle East. The animal feed/fodder value chain will be supported in all countries and pastoralists will be incentivized to engage in fodder production and conservation, as a way to mitigate overgrazing in times of drought. The milk value chain is mainly domestic, and women and youth groups may be supported in this chain to improve their productivity.

Three types of intervention are contemplated and will be tailored to the needs of each country. Component 2 is intentionally designed to complement existing interventions on pastoral production systems by facilitating livestock trade and mobilizing private investment into the livestock value chains.

a) **Upgrading quality infrastructure**. The project will support capacity building and equipment to ensure compliance of livestock and livestock products with export standards. Quality infrastructure refers to public goods of testing facilities, traceability systems, certification services, inspection services and quarantine systems.

b) **Trade facilitation and trade logistics**. A significant portion of the live animal trade is unrecorded, which points to issues of costs, customs, or lack of efficient infrastructure to enable formal trade.

The project will strengthen quarantine facilities and their efficient linkages to ports with digitization of export and sanitary certificates; it will also improve the logistics for the transit of live animals.

c) **Facility to de-risk private investment in the livestock value chains and support local productive capacities**. The project will provide financial support to de-risk private investments into the livestock value chains, focusing on a few demonstration investments to show that sustainable business models can emerge to benefit pastoralists. Investments will have to be private sector initiated, commercially viable, and benefit pastoral producers. The financial support will have two windows, one window for significant investments with substantial demonstration effects (i.e., that can be replicated and scaled-up) and a second window that will focus on women and youth business enterprises in pastoral areas, which could support livelihood diversification. One eligibility criterion for investments will be to provide adaptation or mitigation climate Co-Benefits, thus the whole amount of the facility is expected to generate climate Co-Benefits, and this will be tracked as an indicator.

1.4 Proposed project activities in Ethiopia

Under both components of the project, the activities and supports of the DRIVE build on WB and development partners' previous projects in Ethiopia including Lowlands Livelihood Resilience Project (LLRP), Pastoral Community Development Program (PCDP), Regional Pastoral Livelihoods Resilience Project (RPLRP), and Productive Safety Net Program (PSNP).

De-Risk and Financing Subproject (Component 1) activities:

The regional implementer will be responsible for project and financial management of Component 1 in line with World Bank standards. It will provide a platform of shared services and risk infrastructure necessary for each country to scale up financial services access including insurance coverage. These services will include product design, provision of reinsurance, calculation agent and capacity building. Funds for implementation of component 1 will be managed by ZEP-RE as project implementer and will flow into the insurance value chain:

- Support access to financial service to the pastoralist production group. This will involve two major interventions: first, transfer pastoralists' drought risk to the insurance market and mobilize the capital of private (re)insurance companies (local and international) on the total sum insured; and second, mobilize savings from pastoralists themselves that could be invested in other types of business, thus achieving income diversification and increasing their access to credit.
- Improve financial inclusion of pastoral communities with awareness creation and financial literacy activities. Awareness creation and financial education are necessary to ensure that pastoralists are aware of how the insurance works and what to expect and to build trust in index insurance among pastoral communities.
- Outreach activities to women and youth to address the gender gaps and limited opportunities for access to financial service.

Livestock Value Chains and Trade Facilitation Subproject (Component 2) activities in Ethiopia:

The Component 2 aims to better connect pastoralists to market, attract private investment into the value chains and facilitate the regional livestock trade. The component 2 in Ethiopia focuses on three national livestock trade routes (Mile-Galafi-Djibouti, Ethiopia-Kenya-Moyale, and Jigjiga-Togo Wajjale-Hargessa-Berbera corridors) and on the two value chains of live animals and livestock products. Project

Appraisal Document (PAD) describes that the livestock export in Ethiopia faces various constraints along the aforesaid export corridors. That is because the livestock value chain is highly dominated by middlemen who export livestock through informal channels into major destination markets in the Middle East. Besides, the livestock export in Ethiopia faces major challenges including informal trade, under/over invoicing, poor transportation logistics, poor production and sourcing, poor quality assurance, lack of traceability, and price management.

Hence, the support to the livestock value chains and trade facilitation is divided into three parts i) quality infrastructure capacity building ii) facilitation of regional livestock trade and iii) support for local productive capacities in connection with the regional livestock corridor. Specific activities in the project include:

- **Sub-component 2.1: Quality infrastructure capacity building:** the project will support TA and capacity building on revision of national quality infrastructure standards for livestock products, identification of facilities for accreditation and appropriate equipment for product certification and testing services of livestock products and capacity building for operators to effectively use existing testing equipment. The project will also support Certification of labs that are built by private companies inside or in the vicinity of quarantine centers. In addition, to leverage the capacity created by the ongoing WB financed project National Quality Infrastructure Program (NQIDP), this project will support the training of Quality Assurance professionals from HoA countries in the region at Ethiopian quality assurance centres.

- **Sub-component 2.2: facilitation of regional livestock trade:** the project will support studies to strengthen linkages between pastoralists and live animal exporters/abattoirs. This will help pastoralists to be compensated for the animals that they bring to the market and exporters to get competitive prices that encourage them to off take more animals and integrate better to local/international markets. On **Jigjiga quarantine center**, the project will support a technical and economic feasibility study to bring the quarantine center under a PPP arrangement for operation and management. On the **Jigjiga-Berbera trade route** the project will support a feasibility study for livestock rest stops and works if the construction is economically feasible. On the **Mile quarantine to Djibouti port** route, a feasibility study for a livestock transfer station at Awash Arba (or any other place close to the Mille quarantine and the train route) to transfer quarantined animals to the train that goes into Djibouti port will be undertaken. This would significantly improve the time animals spend in transportation from Mille to Djibouti and avoid another 21 days quarantine in Djibouti. If this activity is found feasible, the project will support the construction of a transfer station and finance the procurement of cattle wagon that take the cattle to Djibouti port. If the transfer station is not found to be feasible, the project will support the construction of a **rest stop** before the cattle enter into Djibouti (in Galafi area) from Mille Quarantine, so that it is properly rested before entering Djibouti and can be loaded within 48 hours onto the ships. The project will **strengthen Ethiopia's Livestock Market Information System (LMIS)** and will link Mille & Jigjiga Quarantine Centres with Djibouti and Berbera ports using IT systems that make information exchange efficient between the stated quarantine facilities.

- **Sub-component 2.3: Support to local productive capacities (seed capital to facilitate private investments in viable businesses that benefit pastoralists and connect them better to**

markets). This activity will provide a Challenge Fund Facility (CFF) that enhances capacities, quality, productivity, and market access of local firms and leverages private capital to be invested in the livestock export sector. Each beneficiary of the fund will specify the nature of the problem, objectives and scope of interventions, detailed costing, targeted results and concrete plans to enhance linkages between pastoralists and the export oriented private sector. The approval of each proposal is subject to identification of direct linkages between pastoralists located in areas where Component 1 of DRIVE has de-risked and fund disbursements will be tied to performance indicators for the private sector. The funds can be used in various ways (for example, equipment upgrading for fodder production, equipment upgrading for abattoirs, compliance training/certification, procurement of livestock trucks, technical assistance, modernization of private quarantines – such as in Adama, etc.). Access criteria, management procedures and application process will be defined in the agreed operations manual of the CFF. The fund will not cover more than 60 percent of the total cost of the CFF proposal. No single firm may receive total grant funding more than US$300,000 from this fund. The CFF will be managed by a full-time manager hired by the project implementation unit.

The project will support local productive capacities, in connection with the regional livestock corridor and niche markets. The project will enable a Public Private Dialogue & Awareness Creation platform supporting PPD forums to bring policy makers, private sector, pastoralist groups, etc., to discuss and take action that improves the livestock value chain. In addition, this activity will conduct successive awareness creation programs and media campaigns to break information asymmetries between pastoralists, abattoirs, exporters etc. Complementarity with ongoing WB project (LLRP) in Ethiopia.

1.5 Proposed project beneficiaries in Ethiopia

The project targets two types of beneficiaries. *The first group* includes pastoralists or agro-pastoralists that live in the arid and semi-arid areas of the country, particularly in Somali, Afar, Oromia and SNNP regions where 92% of the pastoral community exist. But the DRIVE project will target pastoralists in groups who have the capacity to become productive. For this group, the eligibility criteria under Component 1 are any pastoralist group that can bid for premium support under the project as long as: (a) the group is composed of pastoralists whose main economic activity is livestock rearing ; (b) the group is structured around economic activities; (c) the group has the capacity and willingness to engage in commercial activities (that is, sell livestock for commercial purpose); and (d) the group has the willingness to contribute to the cost of the package of financial services provided. Eligibility criterion under Component 2 states that the pastoralist groups that benefit from Component 1 should be linked to the investments supported under Component 2 – seed capital. *The second group* target private investors in the livestock value chains that can lead to higher incomes for pastoral producers. This identifies the involvement of private and financial sector firms, NGOs, etc., that bid for premium support, large business window and women and youth-owned enterprises window. Detail eligibility criteria for the proposed project beneficiaries will be annexed to the ESMF document.

1.6 Objectives of the DRIVE ESMF

- Identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the Environmental and Social Standards (ESSs).
- Promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

- Promote more efficient and effective resource use, ways of pollution prevention and Green House Gases (GHGs) emission avoidance.
- Provide measures to avoid, reduce or mitigate the adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and non-routine circumstances of the project.
- provide mitigation measures for adverse social and economic impacts of land acquisition or restrictions on land use due to the undertaking of the project.
- Protect and conserve biodiversity and habitats, identify the mitigation measures abide and the precautionary approach in the design and implementation of the project and, thus, promote the sustainable management of living natural resources.
- Develop mitigation measures based on the mitigation hierarchies to the adverse impacts of project and ensure that the development process of the project fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of UCs.
- Protect cultural heritage from the adverse impacts of project activities and support its preservation.
- Ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format to ensure for effective and inclusive engagement.

1.7 Scope of the ESMF

The scope of this ESMF is limited to Component 2 of the DRIVE project in Ethiopia that covers the following key tasks:

- Prepare the Environmental and Social Management Framework (ESMF) for the management of the potential environmental and social risks and impacts of Component 2 (Livestock Value Chains and Trade Facilitation) of the project which involves three key sub-projects (upgrading quality infrastructure, trade facilitation and logistics, and seed capital for private investment in the livestock value chains).
- The ESMF will cover security risks assessment.
- Prepare terms of reference for environmental and social impact assessment (ESIA).
- Prepare environment and social screening checklist.
- Prepare a commensurate Labour Management Procedure (LMP).

The above instruments are expected to provide clear, comprehensive and practical guidance on integrating and addressing environmental & social impacts and issues during project implementation.

1.8 Subprojects Exclusion List

Exclusion list

The following types of activities are ineligible for financing under the Project:

- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) impacts.
- Any activities involving adverse impacts on biodiversity conservation and sustainable management of living natural resources.

- Any activities that, due to the nature and scale of the activities, would result in a wide range of significant adverse impacts and risks, which are long-term, permanent, and/or irreversible, impossible to avoid entirely, and cannot be mitigated or required complex, unproven mitigation and excessive associated costs, rendering its risk classification as high.
- Production or trade in any product or activity deemed illegal under the Recipient's laws or regulations or ratified international conventions and agreements.
- Production or trade-in pesticides/herbicides subject to international phase-outs or bans.
- Activities that have a high probability of causing serious adverse effects to human health.
- Activities that may have significant adverse social impacts and/ or may give rise to significant social conflict.
- Activities that may impact on known cultural heritage sites including sites that are important to local communities.
- Any activities that have adverse impacts on cultural heritage as defined under ESS8.
- Any activities that would curtail workers' fundamental rights. These would include: (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) prohibition of child labor, including without limitation the prohibition of persons under 18 from working in hazardous conditions (which includes construction activities), persons under 18 from working at night, and that persons under 18 be found fit to work via medical examinations; (iv) elimination of discrimination in respect of employment and occupation, where discrimination is defined as any distinction, exclusion or preference based on race, color, sex, religion, political opinion, national extraction, or social origin.
- Production or activities that impinge on the lands owned, or claimed under adjudication, by indigenous peoples, without full documented consent of such peoples.
- Any other excluded activities as set out in the ESMF for the Project.

Analysis of 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;
- Assesses the alternatives' feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures.
- For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

1.9 Methodology for the DRIVE ESMF

The preparation of ESMF for DRIVE project depends on multiple sources of data. The next sub-sections highlight on the major elements of the methodology.

Desk review

The preparation of the ESMF for the DRIVE project involved a review of related studies and documents. First, DRIVE related documents including PAD are profoundly consulted to obtain detail information about the project. Second, relevant national, WB and other international environmental and social policies were reviewed to guide the principles and procedures of the necessary environmental and social instruments for DRIVE. Third, as DRIVE intends to complement existing interventions on pastoral production systems, previous WB supported pastoral development programs including LLRP, PCDP, RPLRP and PSNP will be reviewed to obtain information on the environmental and social baseline conditions of the project areas. Besides, other GO financed development programs including CRGE, LDPs and LFSDP and previous studies on pastoral communities will be reviewed for the same purpose.

Stakeholders Consultation

Consultation was conducted with project implanting organizations, beneficiary communities and other project affected parties with the purpose to: (a) assess the possible environmental and social impacts of the DRIVE project; (b) incorporate the views and concerns of these stakeholders regarding the project design and implementation; and (c) inform the community bout project components and its development objective.

In this ESMF, about 18 environmental and social experts and 8 top officials from different federal to woreda level have been consulted through individual interview from December 8 to 17. ***Table 2*** provides details of the officials and experts consulted from federal to local level. Likewise, three community consultations were held. The first was held on 14th of December 2021 in South Omo Zone Banna-Tsamy Woreda Mokach Kebele (SNNPR). About 26 participants took part comprising clan leaders, elders, community representatives and women. The Second community consultation was held on 18th of December 2021 in Borena Zone Harakalo Woreda Germedu Sirba Kebele (Oromia region). About 12 participants took part including elders, community representative, youth representative and women representative. The third community consultation was held on December 16, 2021 in Zone 1 Dubuti Woreda (Afar region). About 14 participants took part composed of clan leaders, elders, community representatives and women. ***Table 3*** provides the details of local community consultations.

Table 1 :Stakeholder Consultation Participants Disaggregate by Administrative Level and Sex

Administrative Level	***Name of Organization***	***Position of the Key Informant***	***Sex***	
			Male = 23	***Female = 3***
Federal	Ministry of Trade and Regional Integration	Environmental Safeguards Specialist	X	
		Social Safeguards Specialist	X	
		Advisor of the Minister	X	
		Livestock Production and Market Directorate Director	X	
	Ministry of Women and Social Affairs (MoWSA)	Strategic Administration Directorate Director	X	
		Women Empowerment Team Leader	X	
		Advisor of the Minister		X
	Ministry of	PIU Social Safeguards Specialist	X	

	Agriculture (MoA)	PIU Environment Safeguards Specialist	X	
		Natural Resource Management Expertise		X
	Meat and Dairy Industry Institute	Women, Children and Youth Director	X	
		Environmental Engineer and Researcher	X	
Regional	Oromia Region Agricultural Bureau	Pastoral Development Sector Head	X	
		Senior Environmentalist	X	
	Oromia Region Environmental Protection Authority	Senior Environmentalist	X	
	SNNPR Agricultural Bureau	Socio-economic Specialist	X	
		Environmental Expert		X
	SNNPR Trade and Market Bureau	Livestock Directorate Director	X	
		Environmental Specialist	X	
		Acting Head of the Bureau	X	
	Afar Region Agricultural Bureau	Head of the Bureau	X	
		Environmental Specialist	X	
	Somali Region Trade and Market Bureau	Head of the Bureau	X	
		Trade and Market Expert	X	
Woreda	Bena-Tsemay Woreda, South Omo Zone, SNNPR	Agricultural Extension Worker	X	
	Adola Woreda, Borena Zone, Oromia Region	Agricultural Extension Worker	X	

Table 2 :Number of Participants of Community Consultation Disagreed by Region and Sex

Region	***Sex***		***Total***
	Male	***Female***	
SNNPR South Omo Zone Banna-Tsamy Woreda Mokach Kebele	20	6	26
Oromia Region Borena Zone Harakalo Woreda Germedu Sirba Kebele	9	3	12
Afar Region Zone 1 Dubuti Woreda	10	4	14
Total	***39***	***13***	***52***

2 PART TWO: REVIEW OF POLICIES, LEGAL AND INSTITUTIONAL FRAMEWORK

For the investment project it is financing, the Bank believes the identification and management of environmental and social risks would support Borrowers in their goal to reduce poverty and increase prosperity in a sustainable manner for the benefit of the environment and their citizens. Part Two of the ESMF provides a review of the national and WB's policies and institutional frameworks towards to goal.

2.1 National Policies and Legal Frameworks Applicable to DRIVE

The government of Ethiopia has issued numerous legal and policy documents that frame the nexus between peoples' socio-economic needs, utilization of natural resources and environment for sustainable development. The next few pages highlight the major legal and policy frameworks in this respect.

Overview of environmental and social policies
Constitution of FDRE (1995)

The Constitution of the Federal Democratic Republic of Ethiopia reflects different enactments. It starts by declaring the governing principles: the rights of the citizens to improved living standard and sustainable development (Article 43 (1)), to be consulted with respect to policies and projects affecting their community (Article 43 (2)), and to live in a clean and healthy environment (Article 44 (1)). Article 40 stipulates the public ownership of both rural and urban land as well as all natural resources for common social and economic well-being of a society. Yet, Article 51 (5) asserts the mandate of the federal government to enact laws for the proper utilization and conservation of land and other natural resources including water. Backdrop to the aforesaid general principles, several specific legal and policy interventions have been designed for friendly society-environment interaction.

Environmental Policy of Ethiopia (1997)

The Environmental Policy of Ethiopia (EPE) reinforces the underlying constitutional principles stated on man-environment interaction. The overall goal of the policy is read as follows: "To improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs" (p. 3). The specific policy objectives are to:

- Ensure that essential ecological processes and life support systems are sustained, biological diversity is preserved and renewable natural resources are used in such a way that their regenerative and productive capabilities are maintained and where possible enhanced so that the satisfaction of the needs of future generations is not compromised; where this capability is already impaired to seek through appropriate interventions a restoration of that capability.
- Ensure that the benefits from the exploitation of non-renewable resources are extended as far into the future as can be managed, and minimize the negative impacts of their exploitation on the use and management of other natural resources and the environment.
- Incorporate the full economic, social and environmental costs and benefits of natural resource development into the planning, implementation and accounting processes by a comprehensive

valuation of the environment and the services it provides, and by considering the social and environmental costs and benefits which cannot currently be measured in monetary terms.

- Improve the environment of human settlements to satisfy the physical, social, economic, cultural and other needs of their inhabitants on a sustainable basis.
- Prevent the pollution of land, air and water in the most cost-effective way so that the cost of effective preventive intervention would not exceed the benefits.
- Conserve, develop, sustainably manage and support Ethiopia's rich and diverse cultural heritage.

Conservation Strategy of Ethiopia (1997)

The Conservation Strategy of Ethiopia (CSE) takes a holistic view of natural, human-made and cultural resources, and their use and abuse. It seeks to integrate into a coherent whole existing and future federal and regional government planning in all sectors that impinge on the environment, including agriculture, forestry, wildlife, fisheries, soils, water resources, minerals, energy, urban planning and cultural heritage conservation. To this end, CSA forward three strategic pillars:

- The CSE is an umbrella strategy which considers all sectors of human activity and enhances the capacity and effectiveness of existing and subsequent strategies. In this respect, the CSE will play an important role in coordinating sectoral strategies.
- A sound partnership is sought between planners, decision makers and the Ethiopian people to manage Ethiopia's natural resources for the Ethiopian people and their children.
- To integrate issues of environment and societal development.

National Water Resources Management Policy (2000)

The National Water Resources Management Policy (NWRMP) has been put in place since 2000 with the overall goal "*to enhance and promote all national efforts towards the efficient, equitable, and optimum utilization of the available water resources of Ethiopia for significant socio-economic development on a sustainable basis" (p. 1).* To realize this goal, the policy spelled out five key water management objectives:

a) Development of the water resources of the country for economic and social benefits of the people on equitable and sustainable basis.
b) Allocation and apportionment of water resources based on comprehensive and integrated plans.
c) Managing and combating drought through *inter-alia*, efficient allocation, redistribution, transfer, storage, and efficient use of water resources.
d) Combating and regulating floods through sustainable mitigation measures.
e) Conserving, protecting and enhancing water resources and the overall aquatic environment on a sustainable basis.

Subsequent strategies and proclamations are devised to effectively implement these objectives of the NWRMP. Among these are the:

- Ethiopian Water Resources Management Proclamation No.197/2000 provides detail legal instruments governing the management, planning, utilization and protection of water resources in Ethiopia.
- Ethiopian Water Sector Strategy (2001) devised a short, medium and long-term action programs that intent to translate the objectives of the NWRMP into effect.

- Ethiopian Water Resources Management Regulations No. 115/2005 issued details of legal requirement and procedure on water quality control, formation of water users cooperative societies and dispute settlement procedures.

Ethiopian Solid Waste Management Proclamation No. 513/2007

The objective of this Proclamation is to enhance at all levels capacities to prevent the possible adverse impacts while creating economically and socially beneficial assets out of solid waste. Accordingly, Urban Administrations shall ensure: (a) the participation of the lowest administrative levels and their respective local communities in designing and implementing their respective solid waste management plans; and (b) create enabling conditions to promote investment on the provision of solid waste management services. Among the key environmental legal measures of this proclamation include:

- The manufacturer or importer of glass containers or tin cans shall develop and implement a system that enables it, on its own or through other persons, to collect and recycle used glass containers or tin cans.
- It is prohibited to grant permit for the manufacture or importation of any non-biodegradable plastic bags with a wall thickness of 0.03 millimeters and less than 0.03 millimeters.
- The head of each household shall ensure that recyclable solid wastes are segregated from those that are destined for final disposal and are taken to the collection site designated for such wastes.

Ethiopian Pest Management Policy

Crop cultivation and livestock production in Ethiopia is predominantly in the small-scale peasant sector and has hardly advanced beyond the subsistence level. In Ethiopia, pre and post-harvest yield losses due to various insect pests, diseases, weeds and vertebral pests such as birds and rodents are believed to be between 30 and 40% (MoA 2016). Ethiopian Government policy in the past was concentrated on a unitary chemical approach to pest control. This approach resulted in several disadvantages. The major ones are direct hazard on the users, resistance development, secondary outbreak, pest resurgence and residue in food and environmental contamination. In recognition of the problems associated with widespread application of pesticide has led to the development of integrated pest management (IPM) with emphasis on promotion of low cost, locally available alternatives with fewer hazards to humans, non-targeted animals and the environment.

Integrated Pest Management (IPM) is a concept that is gaining credence rapidly in Ethiopia as elsewhere. Hence, the agricultural extension program is firmly established as the national strategy, the government and particularly MoA, recognizes that the use of improved seeds and inorganic fertilizers has stimulated pest problems. Therefore, the Ministry of Agriculture (MoA) has emphasized that IPM is the preferred long-term option for pest management.

The National Population Policy of Ethiopia (1991)

This policy has for its major goal the harmonization of the rate of population growth and the capacity of the country for the development and rational utilization of natural resources thereby creating conditions conductive to the improvement of the level of welfare of the population. Hence, its overall goal is to ensure a spatially balanced population distribution pattern, improve the productivity of agriculture and introduce off-farm non-agricultural activities, and integrate population planning, natural resources

management and the rehabilitation of and care for the environment to towards sustainable lifestyles. The setting of this broad goal is premised upon the realization and acceptance by the government of Ethiopia: (a) the importance of demographic factors in development planning and services; and (b) the task of harmonizing the rate of population growth with the tempo of economic and social development requires the involvement and collaboration of a number of governmental and non-governmental actors.

Ethiopian Labour Laws

The Government of Ethiopia (GoE) has issued several labour proclamation that aim to: (a) promote sound worker-management relationships; (b) enhance fair treatment, nondiscrimination and equal opportunity of project workers; (c) provide safe and healthy working conditions for project workers; (d) protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate; (e) prevent the use of all forms of forced labor and child labor; and (f) support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; and providing project workers with accessible means to raise workplace concerns. To this end, the details of relevant Ethiopian Labour Laws are given in ***Annex 3*** including the following:

- Labor Proclamation No. 377/2003
- Federal Civil Servants Proclamation 1064/2017
- Labor Proclamation No.1156/2019 (complements Labor Proclamation No. 377/2003).
- Proclamation No. 632/2009, Employment Exchange Service Proclamation
- Proclamation No. 568/2008 Rights to employment for Persons with Disabilities:

Rural Development Policies and Strategies (2003)

The 2001 Rural Development Policies and Strategies (RDPS) contain intervention measures on pastoral development. As the long-term plan, the strategy aims to sedentarise pastoralists by developing irrigation, and implementing settlement programs. As short and medium intervention terms, the RDPS underscores the need to prevent natural resource degradation through consultation with pastoralists with regard the location of water points. It recommends that rangeland management and conservation based on traditional management systems as a way of improving water availability. Yet, the RDPS intends that a wide range of other activities be made in cooperation with pastoralists' clan leaders and elected representatives.

Pastoral Development Policies

In Ethiopia, there are various pastoral development policies, strategies and programs that have been put in place over years. The broader development imperative endorsed in the Ethiopian Constitution laid down the cornerstone for all subsequent pastoral policies, strategies and programs. *Article 40 (4)* states "Ethiopian pastoralists have a right to free land for grazing and cultivation as well as a right not to be displaced from their own lands". Likewise, *Article 41(8)* affirms that "Ethiopian pastoralists have the right to receive fair prices for their products, that would lead to improvement in their conditions of life and to enable them to obtain an equitable share of the national wealth commensurate with their contribution." With constitutional development imperatives, a number of initiatives and development projects have been designed and implemented in pastoral communities both through government and donor support

over the last three decades. But the pastoral livestock performance in terms of productivity, off-take and improving the living standard of those who engaged is low. These development projects did not improve the environment and socio-economic lives of the pastoral communities. Contrary to the interventions of development projects, the environmental and socio-economic situation of the pastoral communities has been deteriorating from time to time.[2]

Gaps in national policies, legal and institutional framework

An overview of the national policies, legal and institutional framework reveals several gaps regarding the environmental and social management in general and DRIVE project in particular. Among the major gaps include the following:

- **Lack of legal and policy framework:** Some of the legal measures are exclusive to the urban environment. For example: (a) The Ethiopian labour legislation is limited to direct project workers while it lacks any legal framework regarding the labour management procedures of contracted workers, community workers and primary supply workers; (b) Proclamation No. 513/2007 provides a detailed legal and institutional framework for urban solid waste management while it totally ignores how the generation of solid waste in the rural areas should be managed.
- **Lack of specificity:** Existing national environmental and social policies and laws provide the general framework and lack specific contexts to apply in Bank Investment Project Financing.
- **Lack of technical knowledge/skill*:*** The limitation in some environmental and social management involves lack of the necessary know-how and technological resource. The issue of applying Integrated Pest Management is a good example here.[3]
- **Capacity gap:** Despite a good legal and institutional framework, most environmental and social issues are not put into effect due to lack of institutional (adequate number of skilled manpower, and lack/limitation of the necessary logistics and financial resources) capacity at all levels of institutions (federal, regional, zonal and woreda).
- **Lack of coordination:** Sectoral development policies and strategies have been, or are currently being, formulated. Environmental sustainability is recognized in these development policies and strategies as a key prerequisite for lasting success. However, there is as yet no overall comprehensive formulation of cross-sectoral and sectoral issues into a policy framework on natural resources and the environment to harmonize these broad directions and guide the sustainable development, use and management of the natural resources and the environment.

2.2 WB's Environmental and Social Risk Management Requirements in DRIVE Project

The Environmental and Social Framework (ESF) reveals the WB's commitment to sustainable development. To this end, the WB ESF provides ten Environmental and Social Standards (ESSs) that set out the requirements for Borrowers relating to the identification and assessment of environmental and

[2] Land and Water Resource Center. (2005). Livestock situations and resource based interventions report Volume IV.

[3] Fantahun et.al . (2013). Implementation Aspects of Integrated Pest Management (IPM): Policy and Extension Gap in Ethiopia. DCG Report 27.

social risks and impacts associated with projects supported by the Bank through Investment Project Financing.

Overview of the ESSs

Of the ten ESSs, nine are relevant to the proposed DRIVE project Component 2. An overview of these ESSs is given as follows.

Assessment and Management of Environmental and Social Risks and Impacts (ESS1)

ESS1 sets out the following mandatory requirements for projects supported by the Bank through Investment Project Financing:

- The Borrower should conduct environmental and social assessment of projects proposed for Bank financing. The Environmental and Social Impact Assessment (ESIA) will be based on current information, including an accurate description and delineation of the project and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures.
- The Borrower is required to manage environmental and social risks and impacts of the project throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts. The Environmental and Social Commitment Plan (ESCP) set out the material measures and actions required for the project to meet the ESSs over a specified timeframe. The ESCP will form part of the legal agreement between the WB and the Borrower.
- The Borrower is required to adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.
- The Borrower is required to undertake information disclosure to project-affected parties about the potential risks and impacts of the project. Such information shall be disclosed in a timely manner, in an accessible place, and in a form and language understandable to project-affected parties and other interested parties.
- The Borrower is required to monitor the environmental and social performance of the project in accordance with the legal agreement (including the ESCP) with the Bank.

Labour and Working Conditions (ESS2)

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. In the course of project implementation, thus, the Borrower is required to enhance the development benefits of the project by:

- Promoting sound worker-management relationships.
- Enhancing fair treatment, nondiscrimination and equal opportunity of the project workers.
- Providing safe and healthy working conditions to the project workers.
- Protecting project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.
- Preventing the use of all forms of forced labor and child labor.
- Supporting the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; and providing project workers with accessible means to

raise workplace concerns.

Resource Efficiency and Pollution Prevention and Management (ESS3)

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The term "pollution" is used to refer to both hazardous and nonhazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as thermal discharge to water, emissions of short- and long-lived climate pollutants, nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light. Consequently, ESS3 sets out the following requirements:

- The Borrower will consider ambient conditions and apply technically and financially feasible resource efficiency and pollution prevention measures in accordance with the mitigation hierarchy. The measures will be proportionate to the risks and impacts associated with the project and consistent with Good International Industry Practice (GIIP), in the first instance the EHSGs.
- The Borrower will implement technically and financially feasible measures for improving efficient consumption of energy, water and raw materials, as well as other resources. Such measures will integrate the principles of cleaner production into product design and production processes to conserve raw materials, energy and water, as well as other resources.

Community Health and Safety (ESS4)

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities. Hence, ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. Therefore, ESS4 put the requirement that the Borrower will evaluate the risks and impacts of the project on the health and safety of the affected communities during the project life cycle, including those who, because of their particular circumstances, may be vulnerable. The Borrower will identify risks and impacts and propose mitigation measures in accordance with the mitigation hierarchy.

ESS4 sets out three key steps that cover project preparation and implementation. First, the Borrower requires to identify and assessment project-related GBV. Second, based on the risks identified, devise appropriate mitigation measures and implement actions suggested to mitigate project-related risks of GBV in the project area. This step also includes monitoring the effectiveness of the mitigation measures put in place and adapt as appropriate. Finally, the third step relates project response actions for GBV cases during project implementation. It requires Borrower establish effective means of reporting GBV case and its management.

ESS4 requires the Borrower to manage security risks when it retains direct or contracted workers to provide security to safeguard project personnel and property. It states that Borrower's decisions on the appropriate scope of the project's security arrangements are guided by an assessment of (a) potential risks to the project's personnel and property, which may require a security response; (b) appropriate

responses to the identified security risks; (c) potential impacts of a security incident on the project, local communities, and other parties; and (d) potential mitigation measures. In making such arrangements, ESS4 set out the provision that the Borrower is guided by the principles of proportionality and GIIP, and by applicable national laws in relation to hiring, rules of conduct, training, equipping, and monitoring of project security personnel. Likewise, the Borrower will not sanction any use of force by direct or contracted workers in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat.

Land Acquisition, Restriction on Land Use and Involuntary Resettlement (ESS5)

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

ESS5 applies to permanent or temporary physical and economic displacement resulting from the following types of land acquisition or restrictions on land use undertaken or imposed in connection with project implementation:

- Land rights or land use rights acquired or restricted through expropriation or other compulsory procedures in accordance with national law.
- Land rights or land use rights acquired or restricted through negotiated settlements with property owners or those with legal rights to the land, if failure to reach settlement would have resulted in expropriation or other compulsory procedures.
- Restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. This may include situations where legally designated protected areas, forests, biodiversity areas or buffer zones are established in connection with the project.
- Relocation of people without formal, traditional, or recognizable usage rights, who are occupying or utilizing land prior to a project-specific cut-off date.
- Displacement of people as a result of project impacts that render their land unusable or inaccessible.
- Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds and grazing and cropping areas. Land rights or claims to land or resources relinquished by individuals or communities without full payment of compensation.
- Land acquisition or land use restrictions occurring prior to the project, but which were undertaken or initiated in anticipation of, or in preparation for, the project.

Biodiversity Conservation and Sustainable Management of Living Natural Resources (ESS6)

Biodiversity conservation and sustainable management of living natural resources recognizes that:

- Protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems. Biodiversity often underpins ecosystem services valued by humans. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services.
- The importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the nonliving environment. All habitats support complexities of living organisms and vary in terms of species diversity, abundance and importance.
- Addressing issues of sustainable management of primary production and harvesting of living natural resources.
- The need to consider the livelihood of project-affected parties whose access to, or use of, biodiversity or living natural resources may be affected by a project. The potential, positive role of project-affected parties in biodiversity conservation and sustainable management of living natural resources is also considered.
- The requirement of ESS6 is that the Borrower will avoid adverse impacts on biodiversity and habitats.

Indigenous People/Sub-Saharan Africa Historically Underserved Traditional Local Communities (ESS7).

ESS7 refers to a distinct social and cultural group termed as "Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities" (IP/SSAHUTLCs) or as they may be referred to in the national context using an alternative terminology. The term IP/SSAHUTLCs is used in a generic sense to refer exclusively to a distinct social and cultural group possessing the following characteristics in varying degrees:

- Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others.
- 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.
- Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture.
- Distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

ESS7 recognizes that:

- IP/SSAHUTLCs have identities and aspirations that are distinct from mainstream groups in national societies and often are disadvantaged by traditional models of development. In many instances,

they are among the most economically marginalized and vulnerable segments of the population. Their economic, social, and legal status frequently limits their capacity to defend their rights to, and interests in, land, territories and natural and cultural resources, and may restrict their ability to participate in and benefit from development projects.

- The roles of men and women in IP/SSHUTLCs' cultures are often different from those in the mainstream groups, and that women and children have frequently been marginalized both within their own communities and as a result of external developments, and may have specific needs.

Therefore, for IPF through the WB, the ESS7 imposes on the Borrower two essential requirements:

- The Borrower is required to conduct Targeted Environmental and Social Assessment (TESA) of the project. That is, the assessment of the nature and degree of the expected direct and indirect economic, social, cultural impacts of the DRIVE project on the project-affected local pastoral communities.
- The Borrower will be required to develop mitigation measures and actions proportionate to the potential risks and impacts as assessed in TESA.

Cultural Heritage (ESS8*)*

ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. Thus, projects that are likely to have risks or impacts on cultural heritage include those which:

- Involve excavations, demolition, movement of earth, flooding or other changes in the physical environment;
- Are located within a legally protected area or a legally defined buffer zone;
- Are located in, or in the vicinity of, a recognized cultural heritage site; or
- Are specifically designed to support the conservation, management and use of cultural heritage. In such the projects,

ESS8 requires the assessment of the direct, indirect and cumulative project-specific risks and impacts on cultural heritage. Then, the potential risks and impacts of the proposed activities of the project on cultural heritage will be determined. Finally, the Borrow is required to develop measures to avoid, reduce or mitigate the risks and impacts in the course of project implementation.

Financial Intermediaries (ESS9)

Financial Intermediaries (FIs) are required to develop and maintain, in the form of an Environmental and Social Management System (ESMS), an effective environmental and social systems, procedures and capacity for assessing, managing, and monitoring risks and impacts of sub-projects, as well as managing overall portfolio risk in a responsible manner. Accordingly, ZEP-RE has developed ESMS for Component 1 of the project. ZEP-RE's ESMS is comprised of a set of policies, procedures, tools, and internal capacity to identify and manage ZEP-RE's environmental and social aspects it is exposed to through its clients. It states ZEP-RE's commitment to E&S risk management, explains its procedures for identifying, assessing, and managing environmental and social risks and impacts, defines the decision-making process, describes the roles, responsibilities, and capacity needs of staff for doing so, and states the

documentation and record keeping requirements. It includes elements such as Grievance Mechanism and Stakeholder Management and Engagement Plan. It also provides an ESMS Guidance Note to Insurance Companies, NGOs acting as intermediaries between the pastoral groups and ZEP-RE, on how to check for compliance with Microinsurance E&S eligibility criteria. They will sensitize pastoral groups about the identified E&S risks and provide advice on how to address and manage them.

Stakeholder Engagement and Information Disclosure (ESS10)

ESS10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of Good International Practice (GIP). Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. So, ESS10 provides the following essential requirements:

- The first requirement refers to stakeholder engagement. ESS10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of Good International Practice (GIP). Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.
- Information disclosure is the second essential requirement. In line with this, ESS10 states that the Borrower will disclose project information to allow stakeholders to understand about the proposed project. Information disclosure comprises: the purpose, nature and scale of the project; the duration of proposed project activities; potential risks and impacts of the project on local communities and proposed mitigation measures; and proposed stakeholder engagement process.
- The Borrower is required to engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design.
- In the case of project activities involving involuntary resettlement, IP/SSHUTLCs, and cultural heritage, the special information disclosure and consultation requirements set out in ESS5, ESS7 and ESS8 should be applied in addition to the general requirements stated in the first three points.

For all the environmental and social issues highlighted above, the environmental and social assessment as set out in ESS1 will consider direct, indirect and cumulative project-related impacts. For each environmental and social issue, the environmental and social impact assessment will determine the scope and extent of environmental and social risks and impacts due to the implementation of the proposed project. Then, the environmental and social management will adopt a mitigation hierarchy approach to:

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

Table 3 :*Discrepancies between the National and World Bank's Environmental and Social Policies*

ESMF	***Discrepancies***		***Measures to Address the Gaps***
	National Legislation	***WB ESS***	
ESS2: Labour Management Procedures	No requirements for the project contracted workers	The requirements for project contracted workers are set out in ESS2 paragraphs 9 to 33 as specified in Section E	The project LMP applies the requirements of the WB
	No requirements for the project contracted workers	The requirements for the project community workers are set out in ESS2 paragraphs 34 to 38 as specified in Section F.	The project LMP applies the requirements of the WB
	No requirements for the project primary supply workers	The requirements for the project primary supply workers set are out in ESS2 paragraphs 39 to 42 as specified in Section G.	The project LMP applies the requirements of the WB
ESS3: Waste Management	The legal framework is limited to urban waste management while it totally ignores management of rural waste generation.	ESS3 set out clear project specific waste management whether it is in urban or rural areas.	The project applies ESS3 to fill the gaps.
ESS3: Pest Management	Lacks specific guidelines for pest management as it applies to the project	ESS3 provides detailed guidelines for pest management as it applies for the project	The project applies ESS3 to fill the gaps.
ESS4: Community Health and Safety	The national legislation lacks specific provisions on assessing and managing community health and safety associated with the undertaking of project activities.	ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to health and safety risks and impacts. In addition, it recognizes that some groups within a community may be particularly vulnerable to health and safety risks and impacts from project activities because of their particular circumstances, for example, their age, health, level of education, occupation, socioeconomic conditions, status, gender, and/or	The project adhere to ESS3, particularly the provisions on: (a) Infrastructure and Equipment Design and Safety (paragraphs 6-8); (b) Safety of Services (as provided in paragraph 9); (c) Traffic and Road Safety (as per the provisions in paragraphs 10-13); (d) the provisions on

ESMF	*Discrepancies*		*Measures to Address the Gaps*
	National Legislation	*WB ESS*	
		disability.	Community Exposure to Health Issues (paragraphs 15-16); (e) Management and Safety of Hazardous Materials provided in paragraphs 17 and 18; (f) Emergency Preparedness and Response (provisions from paragraphs 19 to 23)
	The national legislation has no provisions to guide assessing risks and impacts from deploying security personnel for the project purpose.	ESS4 states that deploying project security personnel (whether public employees of a private security company or public such as police or military personnel) can pose risks to, and have unintended impacts on, both project workers and local communities. Accordingly, ESS4 and Good Note Practice on the Use of Security Forces set out details of provisions on assessing and managing the risks and impacts of the use of security personnel.	The project resort to the provisions in ESS4 ((paragraphs 24 through 27) and Good Note Practice on the Use of Security Force.
ESS5: Land Acquisition, Restriction on Land Use and Involuntary Resettlement	Ethiopian law does not make any specific accommodation for squatters or illegal settlers, other than recognition of some use-rights, such as when settlers can claim rights to the land; according to the Proclamation No. 1161/2019 Article 21 (2) ``where Land is under illegally occupied, the Woreda or Urban Administration may takeover of the land after	Whereas the applicability of the WB ESS5 extends to those PAPs who have no recognizable legal right or claim to the land or assets they occupy or use (paragraph 10 (c)).	

ESMF	*Discrepancies*		*Measures to Address the Gaps*
	National Legislation	*WB ESS*	
	removing the property, demolishing building on the land``.		
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (IP/SSAHUTLCs)	The Ethiopian legal framework has no specific provisions that recognize the differential adverse impacts on the rights of the project-affected IP/SSAHUTLCs caused due to project-related land acquisition. However, the constitution of FDRE recognizes, without directly referring to the IPs, that "Government shall provide special assistance to Nations, Nationalities, and Peoples least advantaged in economic and social development." (Constitution. 1995, Art. 89 Para. 4).	In contrast, the WB policy set out additional provision exclusive to the project-affected IP/SSAHUTLCs. It states that IP/SSAHUTLCs may be particularly vulnerable to the loss of, alienation from or exploitation of their land and access to natural and cultural resources. In recognition of this differential vulnerability, in addition to the General Requirements stated in ESS5, ESS7 (paragraph 26) requires the Borrower to obtain the Free Prior Informed Consent (FPIC) of the project-affected IP/SSAHUTLCs in circumstances in which project-related land acquisition will: (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause relocation of IP/SSAHUTLCs from land and natural resources subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on IP/SSAHUTLCs' cultural heritage that is material to their identity and/or cultural, ceremonial, or spiritual aspects.	This ESMF applies the WB ESS7 that set out the differential resettlement measures for the project-affected IP/SSAHUTLCs.
ESS10: Stakeholder Engagement	Insufficient as it required for the project. The national legislation recognizes the need for stakeholder engagement. However, it provides no specific guidelines and requirements as to how to disclose project information and engage	ESS10 set out specific requirements and guidelines on how to disclose project information and conduct meaningful stakeholder engagement throughout the project cycle.	The project applies ESS10 to fill the gaps.

ESMF	*Discrepancies*		*Measures to Address the Gaps*
	National Legislation	*WB ESS*	
	stakeholders during the preparation and implementation of the project.		
Institutional capacity gaps	Technical knowledge gaps to put the legal framework into practice	Provides ways for institutional capacity development for the effective implementation of the ESSs.	The project devises measures for institutional capacity building.
Lack of specificity	Existing laws provide the general framework and lack specific contexts to apply in Bank Investment Project Financing.	The ESSs set out specific contexts as apply to Bank Investment Project Financing.	The project develops appropriate ESMPs.

2.3 The WB Environmental, Health and Safety (EHS) Guidelines

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP).

These General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines which provide guidance to users on EHS issues in specific industry sectors. For complex projects, use of multiple industry-sector guidelines may be necessary.

The Environmental Health and Safety relevant to the sub-project activities relating to livestock processing industries such as Abattoir/meat production and dairy products that may generate, store or handle any quantity of hazardous and non-hazardous waste are required to comply with the following guidelines:

- The implementation of livestock processing industry sub-project will avoid the generation of hazardous and nonhazardous waste. Where waste generation cannot be avoided, it will minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment. If the generate waste cannot be reused, recycled or recovered, the sub-project will treat, destroy, or dispose of it in an environmentally sound and safe manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material.
- If the generated waste is considered hazardous, the project will comply with existing requirements for management (including storage, transportation and disposal) of hazardous wastes including national legislation and applicable international conventions, including those relating to trans-boundary movement. Where such requirements are absent, the project will adopt GIIP alternatives for its environmentally sound and safe management and disposal.

- Livestock processing industry activities that generate waste should characterize their waste according to composition, source, types of wastes produced, generation rates, or according to local regulatory requirements.
- The implementation of livestock processing industry sub-project will avoid or minimize the potential for community exposure to hazardous materials and substances that may be released by the project. Where there is a potential for the public (including workers and their families) to be exposed to hazards, particularly those that may be life threatening, the sub-project implementation will exercise special care to avoid or minimize their exposure by modifying, substituting, or eliminating the condition or material causing the potential hazards.
- The project will implement measures and actions to control the safety of deliveries of hazardous materials, and of storage, transportation and disposal of hazardous materials and wastes, and will implement measures to avoid or control community exposure to such hazardous material.

The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them.

The applicability of the EHS Guidelines should be tailored to the hazards and risks established for each project on the basis of the results of an environmental assessment in which site-specific variables, such as host country context, assimilative capacity of the environment, and other project factors, are taken into account.

The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.
Effective management of environmental, health, and safety (EHS) issues entails the inclusion of EHS considerations into corporate and facility-level business processes in an organized, hierarchical approach.

3 PART THREE: ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

As it understood in the Ethiopian context, pastoralism is not only a means of livelihood but also it is a comprehensive way of life that encompasses the environmental, socio-cultural, economic and political organizations of the people who make life this way. This part of the ESMF focuses on the environmental and social baseline conditions of the project areas.

3.1 Project Target Areas

Pastoral people in Ethiopia occupy 61% of the total land mass of the country. The DRIVE project targets the areas where the overwhelming majority (92%) of the pastoral communities in Ethiopia is living, namely: Afar, Somali, parts of Oromia and the Southern Nations, Nationalities and People's (SNNP).

Ethiopian pastoralists represent many different ethnic groups. The most important ones in terms of number of people, livestock and size of area occupied are the Somali in the east and southeast, the Afar in the northeast, the Borana-Guji and the South-Omo pastoral communities in the southern part of the country comprising 53%, 29%, 10% and 6% of the pastoral population in Ethiopia, respectively (Solomon 2020 and Azage and Getachew 2020).[45] More importantly, the three ethnic groups represent the vast majority (97%) of the pastoral communities along the international livestock trade routes (Mille-Djibouti, Jigjiga-Berbera, and Borena-Kenya) proposed by DRIVE the chapter for Ethiopia (Ministry of Livestock and Fisheries 2017). [6] Therefore, the topics to follow provide overview of the environmental and social baseline conditions focusing on the Somali, Afar and Borena pastoral areas.

3.2 Biophysical Environment

Geographic location

The Afar as ethnic group occupies a territory that comprises the Afar Regional State. The region is located in north-eastern Ethiopia sharing international border with Eritrea and Djibouti while bordered with Somali region in the south-east and Amhara region in the west. The area occupied by the Afar pastoral communities is part of the Awash-Mille-Djibouti highway one of the three international livestock trade-routes proposed in the DRIVE project. Having a total area of 100,860 km2, the region is the fourth largest in Ethiopia. It is divided into 5 zones and 30 districts (*woredas*).

The Somali pastoralists live in the Somali regional state located in the eastern and southeastern lowlands of Ethiopia. It borders the Republic of Djibouti in the north, the Somali republic in the east, the Oromia region from south to northwest, and the Afar region in the north and northeast. The total land area of the region is about 327 000 km2, equivalent to 30% of the national land area. It is divided into nine sub-regional administrative zones that include the Shinile, Jigjiga, Fike, Dege-Habur, Warder, Korahe, Gode, Afder and Liben zones. The Somali pastoral communities are located along the Jijiga-Berbara trade-route the second route proposed in the DRIVE project for the intervention through the livestock value chains and trade facilitation (MoWIE 2017).[7]

The Borena and Guji pastoral communities are living in Borana zone. Borena zone is among the 20 administrative zones in Oromia regional state. The establishment of the Borena zone was twice in the history. In the first time, the zone was separated from the former Borana zone (which includes the present Guji Zone and West Guji Zone) and re-established at the end of 2002 by including the present west Guji zone jointly known as Borana zone. In the second time, at the end of 2016 Borena zone was established again separated from the highland woreda's of West Guji zone and left with almost all lowland pastoralist areas comprising the Borena and Guji Pastoral communities. Currently, the zone has

[4] Solomon Desta. (2020). Pastoralism and Development in Ethiopia. Economic Focus, 9 (3):12-20.

[5] Azage Tegegne and Getachew Legese. (2020). Study of Selected Livestock Innovations in Ethiopia. ZEF Working Paper Series, ISSN 1864-6638 Center for Development Research, University of Bonn

[6] Ministry of Livestock and Fisheries. (2017). Ethiopian Livestock Sector Analysis: A 15 Year Livestock Sector Strategy. Addis Ababa: Ministry of Livestock and Fisheries and the International Livestock Research Institute.

[7] EFDR Ministry of Water, Irrigation and Electricity. (2017). Ground Water Evaluation and Assessment Project of Borena Area. Addis Ababa: MoWIE.

thirteen rural pastoralist woredas: namely, *Arero, Dhas, Dillo, Dirre, Dubluk, Eelwoye, Gomole, Guchi, Miyo, Moyale, Taltale, Yaballo* and *Wachile*. There are 134 rural kebeles (PA) and 11 town kebeles in the zone. Yabellow is the capital of Borena zone (Fantahun et.al, 2020).[8] The Borena pastoral communities are located along the Borena-Kenya trade route the third trade route proposed in the DRIVE project.

The SNNPRS is where more than 50 different ethnic groups are living. About 80 percent of the population in the region lives in the highland areas (an area representing 40 percent of the regional land holding) and predominantly subsist based on agricultural production. While the remaining 20 percent of the population live in the arid and semi-arid areas (an area representing 60 percent of the regional land surface) and primarily earn their livelihood based on pastoral activities (Yohannes et.al, 2005). [9] The DRIVE project targets this later group of people. Despite living in Bench-Maji zone, Konso Special Woreda, Burji Special Woreda, and Derashe Special Woreda, the pastoral communities in SNNPR are concentrated in South Omo Zone. It is bordered on the south by Kenya, on the west by Bench Maji, on the northwest by Keficho Shekicho, on the northeast by the Dirashe and Konso Special Woredas, and on the east by the Oromia Region. Typical about South Omo zone as compared to other project target areas is the existence of 14 different pastoral groups. These ethnic groups comprise Ari, Banna, Hamer, Dasenech, Nyangatom, Kara, Mursi, Bodi, Tsemay, Male, Arbore, Dime, Bacha, and Kwegu.

Climate

The project target pastoral communities occupy the vast arid and semi-arid areas of the country. In terms of temperature, the Afar region is one of the hottest inhabited places in Ethiopia, with temperatures sometimes exceeding 50°C. Most of these harsh areas in the region are occupied by the Afar pastoralists and characterized by an average annual rainfall of only 188 mm. This makes the shortage of water and grazing land the most critical problem for the Afar pastoralists to subsist based on livestock production (Davies and Bennett 2009).[10]

The Borena-Guji pastoral communities are living in the arid low land areas of the southern Oromia region. The rainfall in these areas varies substantially from 400–1100mm with an average 700mm. The variability is high and ranges from 35 to 57% of annual means. The annual rainfall varies significantly, which increases by 64mm for each 100mtrs increase in elevation. Likewise, the Somali pastoralists live intimately with climatic variability and change, traditionally adapting to the very hot and dry conditions through pastoral livelihoods and detailed knowledge of their local environment such as local ecological and meteorological (MoWIE 2017).

Despite the effect of the Omo river drainage, mostly, the climate in South Omo zone is classified as hot-arid climate. It is characterized by poor sparse vegetation with mean annual temperature ranging from 27˚C to 29˚C and mean annual rainfall less than 450mm. Evaporation is 20 or more times in excess of precipitation in same area. It is characterized by strong wind, high temperature, low rainfall and low relative humidity with little cloud cover (Enyew and Hutjis, 2015).

[8]Fantahun et.al. (2020). Socio-economic profile of arid and semi-arid agro-pastoral region of Borana rangeland Southern, Ethiopia. MOJ Ecology and Environmental Sciences, vol. 5 (2): 113-122.

[9]Yohannes et.al. (2005). Addressing Pastoralist Conflicts in Ethiopia. Africa Peace Forum Report.

[10]Davies, J. and Bennett, R. (2009) Livelihood adaptation to risk: constraints and opportunities for pastoral development in Ethiopia's Afar region. *The Journal of Development Studies* 43(3), 490-511.

Common to all the three project areas is the rainfall variability and associated uncertainties in the spatial and temporal distribution of water resources and grazing for animals. Mobility is fundamental to these pastoralists' strategies for coping with unpredictable rainfall, livestock diseases, and the sustainable use of scarce natural resources. Hence, pastoralists in the project target areas face a number of challenges that threaten the sustainability of their traditional livelihood practices. Trends indicative of climate change, such as increasingly recurrent drought, floods, erratic rainfall patterns, and high temperatures are adding significantly to these stresses. Climate change in the project areas has direct effects on livestock productivity as well as indirectly effect through changes on the availability of fodder and pastures (Enyew and Hutjis, 2015). [11]

Geological formation

The project areas share the nature of the geological formation. All sorts of geological conditions are found, with volcanic, karstic, sedimentary and basement formations. One common parameter in the project target areas is that rainfall is always lower than 600 mm per year, usually under 400 mm, and sometimes lower than 200 mm. Large areas have brackish or salty groundwater, with mineral contents of 1.5 g/l and above that makes it unsuitable for drinking water and most other purposes. As a result, water resources in the project target areas, are usually scarce, and uneasy and costly to access for the pastoral water supply (WaLRC 2015).[12]

Natural habitats and protected areas

As defined in this ESMF, natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition. Whereas, legally protected area refers to a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

The general baseline conditions show that the project areas are endowed with different natural habitats including terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. The baseline data that follow provide an overview of the natural habitats in the project areas. However, the ESMF recommends that appropriate planning for the management of the natural habitats in the project areas and the biodiversity they support requires undertaking rigorous assessment engaging technical specialists.

Awash National Park provides examples of natural habitat shared between the project intervention areas. The larger part of the park is found in the Afar regional state while some of its eastern part are located in the Somali region. The Awash National Park is located to the east of Addis Ababa at about 225 km along the Ethio-Djibouti Highway. It was established in 1966 and gazette in 1969 as a strict

[11]Yohannes et.al. (2005). Addressing Pastoralist Conflicts in Ethiopia. Africa Peace Forum Report.

[12]Land Resource Center (WaLRC). (2015). Resource Availability Assessment Methodology for Land and Water Related Interventions in Wabi-Shebele and Genale-Dawa Basins, Ethiopia. Addis Ababa: WaLRC.

conservation area covering about 760 km^2 originally, but currently reduced to 598 Km^2. The Park is an important source of rivers, lakes and recognized plant biodiversity (Fitsum et al 2018).[13]

As described by Belay (2015), There are several key features of the Awash National Park for the interest of the DRIVE project's biodiversity conservation and sustainable management of living natural resources. First, Awash National Park is from the beginner protected areas of the country with high biological diversity of richness and conservation challenge. Second, the altitude of the park ranges from 705 to 2007m a. s .l. characterized by semi-arid climate and bimodal rainfall with the annual rainfall ranging between 400 and 700 mm. Awash National Park comprises all the types of geographic units or airway (terrestrial, freshwater, or marine) that supports assemblages of living organisms and their interactions with the non-living environment. Third, exemplifying as a critical habitat, Awash National Park is one of the few national Parks in Ethiopia with extraordinary biodiversity. Out of the nine vegetation types in Ethiopia, Awash National Park comprises four of them: *Acacia-Commiphora* woodland, grassland, savanna and shrub land. Awash National Park is the home for more than 81 species of mammals, 453 species of birds (6 of them endemic) and 43 species of reptiles. Awash National Park is the home to five vulnerable species (Lesser horseshoe bat/*Rhinolophus hiposiderose minimus*, Trident leaf-nosed bat/*Asellia patrizii*, Spot-necked/O*tter, Lutra macuricollis* (lion, Panthera leo and Soemmering's gazelle, and Gazelle soemmerringi)). Fourth, Awash National Park remains one of the high potential tourist areas in the central Rift Valley of Ethiopia, because of its proximity to Addis Ababa and road access for tourists. An appealing tourist attraction of the park include: diverse culture of people; the abundance of wildlife and plant resources; scenic value and; the existence of archeological sites. 2015).[14] Finally, the Park is located along one of the three major international livestock trade-route of Ethiopia (Mile-Djibouti routes) proposed for the interventions of all the three sub-projects (upgrading quality infrastructure, trade facilities and logistics, and seed capital for private investment in livestock value chains) under Component 2.

Omo National Park is located in the Southern Nation Nationalities and Peoples Regional State and part of the park is located in South Omo Zone one of the DRIVE project intervention areas. Close to the Kenyan international frontier and bordered by the Omo river, this protected area is an essential part of the Boma-Omo-Gambella Trans-boundary Ecosystem. This national park of 4069 km^2 is composed of a mosaic of landscapes ranging from grassy to bushy plains (400 to 700 masl), woody savanna hills (700 to 1200 masl) and forested mountains (about 1200 meters). The four main rivers (Omo at the eastern border, Kibish at the southern border, and Mui and Kuma rivers at the south-western border) create prefect conditions for the Riverine Forest type habitat. Several hot and cold springs complete this attractive and complex ecosystem. The landscape heterogeneity in the park leads to a diversification of habitats and therefore to high wildlife biodiversity (over 300 species of birds and 57 mammals). Omo National Park is not only a conservation hotspot because of its high ecological diversity (fauna and flora) but also for its complex and dynamic socio-cultural diversity. Eight underserved pastoral communities are living in and/or around the park (Nyangatom, Mursi, Bodi Me'en are from South Omo zone and Suri, Dizi, Kwegn and Mguji from Bench Maji zone). The livelihood of these pastoral groups is highly

[13]Fitsum et al (2018). Biodiversity Status & Conservation Challenges of Protected Areas of Ethiopia: Awash & Nechsar National Parks in Focus. *Journal of Natural Sciences Research*, 8 (5): 46-61.

[14]Belay Zerga (2015). Awash National Park: Its Degradation Status and Protection Measures. *Palgo Journal of Agriculture* 12 (3): 57-66.

dependent on access to and exploitation of the natural resources in the Omo National Park (Pierr-Cyrill 2013).[15]

However, as to Tezera (2015), all the project areas largely share the same types of natural habitats. These are the bushland, woodland, grassland and rangelands. There are five major vegetation types dominated in these types of natural habitat: (1) open grass land: characterized by no trees and shrubs, and predominantly covered by grasses, the dominant species are *Chrysopogon plumulosus* and *Bothriocloa radicans; (2)* grassland with scattered trees; (3) bush land with dispersed and short trees; (4) thicket/shrub grass land with the composition of trees (5-20%), shrub (10-15%), and grass 25-55% between. *Acacia senegal*, *Acacia tortolis Dobera glabra* and *A. mellifer;* and *(5)* shrub land occurs in area where there is a moderate to heavy grazing pressure.

3.3 Socio-economic Environment

Demographic characteristic

According to the 2007 population and housing census, the Somali regional state had a total population of 4,439,147 2 of which 468,784 were male and the remaining 1,970,363 female. The total population in Afar region was 1,411,092 comprising786,338 male and 624,754 female. Though covering a large geographic area, Borena zone is sparsely populated with only 966,467 total population, 489,001 male and 477,466 female. South Omo zone had a total population of 755,673 out of which 288,638 male and 289,035 female.

Language and genealogy

The languages spoken by the Somali, Afar and Borena-Guji are closely related to one another and belong to the same language family known as Cushitic. As compared to other project target areas, one of the distinct features of South Omo zone the diversity of the languages spoken.

All the project target pastoral communities represent distinct social and cultural group expressed 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; and (c) customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture. For example, the overwhelming majority of Somalis trace their genealogical origin to the mythical founding father, *Samaale* or *Samaal.* Genealogy constitutes the heart of the Somali social system (Bemlaku 2019).[16]

Traditional social, economic and political institutions

Clan system

In all the project target areas, the *clan system* is the main form of social as well as political (as relates to the form of collective decision-making) organization. In such social groups, clan leaders and councils of elders are representatives of a community who negotiate on crucial matters such as land and natural

[15]Pierr-Cyrill Renaud (2013). Omo National Park: Report for the Wet Season Aerial Survey. Gembloux: Gembloux Agricultural Universiy.

[16]Land Resource Center (WaLRC). (2015). Resource Availability Assessment Methodology for Land and Water Related Interventions in Wabi-Shebele and Genale-Dawa Basins, Ethiopia. Addis Ababa: WaLRC.

resources (Bamlaku 2019).[17] Hence, *collective identity* is understood to apply to groups or communities rather than individuals.

In Afar for instance, the clan, a group of extended families, is the most important political and social unit. Traditionally, the clan as a social organization serves as a nucleus for administration and co-operation to conduct social activities among clan members. Clan kinship is very strong. Issues that affect members of a clan are discussed and decided collectively under the guidance and leadership of clan leaders. In times of great difficulties (e.g. times of drought, when a family is endangered by external attack, etc.) individual families seek and gain support from their clan kinsmen. There are large and small clans. The large ones are *Arebta*, *Damoita*, *Dahimela*, *Hadarmo* (Able), *Hadu*, *Seka*, *Maeyto*, and *Baleessewa* (Yadesse and Yonas 2018).[18]

Indigenous community institutions

The Ugas system in Somali: Somali pastoralists have an indigenous traditional institution of administration system called *Ugas* System. *Ugas* is the head of all clans and the supreme leader in Somali ethnic groups. He has the supreme power and any decision made by the *Ugas* is automatically accepted by all ethnic groups. He is well educated and has frequent contact with each of the clan leaders. The *Ugas* has a meeting room and a schedule for discussion with clan leaders on peace and security issues and on any agenda that impacts the community. Under the *Ugas*, each clan has their own clan leader who directly takes orders from the *Ugas* and passes them on to his clan members.

The Afar traditional administrative system: the Afar people are known for their longstanding and well established indigenous community institutions. They have developed a renowned indigenous institution of *the traditional administrative system.* It is the socio-cultural institution through which the Afar people have developed their political life over the years. In particular, the Afar traditional administrative system is organized into five socio-cultural units. The units are hierarchically called the sultanates, clan leaders, *Firma* or *Balabat* (a middle level socio-cultural administrative power that is transmitted across generations), community leaders, and household heads. Such structural units strictly reflect the way people live their daily lives. Likewise, there are three major socio-cultural groups among the Afar people each assigned with specific social responsibilities. *Meharu* is the first group. It is the traditional standby army responsible for protecting its clan and territory from any external enemy. The *meharu* traditional group consists of only the young and energetic segments of the community. *Ashab* is the second group. It is through this traditional group that labour is organized for various tasks. *Fi'ema* is the third group. It is a traditional play group formed in same sex and age groups. Hence, there is male *fi'ema* and female *fi'ema*.

The Gadaa system in Borena pastoral community: the *Gadaa* system is Borena's indigenous institution through which the community administered, defended their territory, maintained and developed their economy. It is a comprehensive and self-sufficient system that influences people's day-to-day life. *Gadaa* is a system of socio-cultural organization based on age-grade of the male members of the community that succeeds each other every 8 years in assuming economic, political, military and social responsibilities accordingly.

[17]BamlakuTadese (2019). "Ethiopia: The Roles of the Council of Elders (Menguddo)" in Gumma Customary Institution of Conflict Resolution. DOI:10.24193/csq.26.3 Published First Online: 05/01/2019

[18]Tadesse Barhe and Yonas Adaye. (2018). The Impact of Local Conflict on Regional Stability. https://www.files.ethz.ch/isn/123909/2007_05_01_Afar.pdf

Socio-cultural age-groups in the pastoral communities in South Omo: the pastoral communities in South Omo share the socio-cultural age-groups. Irrespective of their sex, any identified socio-cultural group based on age is called *Anamo*. Thus, *anamo* is the generic socio-cultural expression of an age group. Accordingly, there are boys' *Anamo*, girls' *Anamo*, adult men *anamo* or adult women *anamo*. In line with these age-grouping, different responsibilities are assigned that serve the day-to-day life of these pastoral communities.

Livelihood

The Somali, Afar, Borena-Guji and the various pastoral groups in South Omo as specified to the project area are pure-pastoralists. Ethiopia is endowed with significant livestock resources and holds the largest livestock population in Africa, estimated at around 60 million cattle, 60 million sheep and goats, 52 million chickens, 4.5 million camels, 10 million bee colonies and 7.2 million equines. Of these total, it is estimated that the pastoral communities in the project target areas raises 40% of the cattle, 75% of the goats, 25% of the sheep, 20% of the equines, and 100% of the camels (Solomon 2020).

Table 3. Mean reproduction and production performance of livestock in Borena and Somali Regions

Parameter	Cattle	Camel	Goat	Sheep
Age at first mating-months	45.6 (7.2)	52.8 (8.4)	14.6 (6.6)	10.8 (6.0)
Age at first parturition, months	56.4 (7.2)	64.8 (8.4)	20.7 (7.1)	17.0 (6.4)
Parturition interval, months	15.9 (5.3)	25.9 (7.8)	7.6 (2.3)	7.4 (2.1)
No. offspring /life time	10 (1.9)	10.3 (2.6)	11.0 (5.1)	14.7 (8.4)
Milk yield liter/day	2.23 (1.0)	5.3 (3.3)	0.53 (0.32)	0.34 (0.11)
Lactation length, months	8.3 (4.2)	14.9 (7.8)	2.7 (1.90)	-

**Source: Adugna and Aster (2009). Note: figure in bracket is SD*

These pastoral groups subsist off their animals both directly through drinking milk and eating meat, and indirectly by exchanging livestock or their products for grains and other goods and services. The project target pastoral areas breed cattle, sheep and goats have make-up more than 90% of the annual legal exports of live and processed animals in Ethiopia. In addition, about hundreds of million dollars' worth of pastoral livestock is traded on the cross border international market each year and official statistics never reflected this volume (Solomon 2020). However, the common problem in the project target areas is that the productivity of livestock in terms of milk production, reproduction, market weight and age and survival/adaptation to the prevailing environment is so poor (WaLRC 2015). The data in the above table provide a glimpse to the whole picture.

Land tenure system

Common to project-affected communities is that land cannot be owned or claimed exclusively either by an individual or as a family holding, nor can it be sold. Instead, land and natural resources are communal property belonging to the clan members. Clan leaders and council of elders are the traditional authorities entrusted with the power to control access to and use of land and natural resources (Tenaw

2016).[19] This means, for the pastoral communities in the project target areas, *collective attachment* signifies that the groups generally consider their lands and resources to be collective assets. It also signifies that these groups' economies, modes of production, social organization, and cultural and spiritual circumstances are generally linked to particular territories and natural resources. The concept of collective attachment refers to geographically distinct habitats or ancestral territories, or areas of seasonal use or occupation and the natural resources therein.

Indigenous knowledge in resource management

The pastoral communities in the project target areas a long-standing indigenous knowledge in resource management.

Water use and management

The pastoral communities in the project target area have a well-established indigenous knowledge and institution on efficient water use and management. For example, shallow wells of the Borena (locally known as *Ellas* and *Tulla*) are the most important sources of water for domestic uses as well as for watering selected livestock (e.g. lactating cows, calves and horses). The pastoralists usually take the bulk of their livestock to the valleys of permanent streams like Dawa, Weyb and Genale rivers during the dry season, where the animals can have access to abundant water as well as more extensive grazing areas in the valleys. Similarly, the practice of harvesting rainwater at community as well as household levels is well-known among the pastoral communities in the project target areas. For example, among the Somali pastoral communities, the cistern locally known as the *Birkha* is a well-known practice. It is based on floodwater harvesting and then storing it for dry season use (WaLRC 2015).

The traditional water use and management system has been the most stable and meticulously organized system under the auspices of traditional institutions. The traditional water tenure systems are varied depending on specific traditional institutions. Among the traditional institutions, the *Gadaa* system is well known. Because access to water is central to pastoral livelihoods, the *Geda* rules that govern it are closely linked to the survival of the community. It is forbidden to deny water to anyone, including members of neighboring communities. It is also forbidden to ask them to pay for it. Settlements in the pastoral areas of Borena are predominantly based on economic and traditional resource management and easy access to resources, mainly water and grazing land. Settlements are strongly related to common water sources called *madda* and grazing lands called *dheda* (Odhiambo 2012). [20]

Rangeland management

The project target pastoral communities occupy the arid and semi-arid areas in the country making their living by keeping herds of animals in a communal or free-range land system. The naturally harsh climatic conditions (i.e. high temperature, low and highly variable rainfall regimes, high evaporation rates, low density vegetation cover, and fragile soil), the ever increasing peoples' need for survival compounded by climate change, have significantly increased the vulnerability of the project-affected pastoral communities

[19]Tenaw, Z. (2016). "Constraints of Pastoral and Agro-Pastoral Livelihood Diversification in Eastern Ethiopia: The Case of Mieso District, Oromia Regional State," *International Journal of Sciences Basic and Applied Research*, 26 (3): 267-274.

[20]Odhiambo, M. (2012). Impact of conflict on pastoral communities' resilience in the horn of Africa. Addis Ababa: Oromia National Regional State

In view of the aforesaid vulnerability conditions, indigenous knowledge of rangeland management is widely practiced in all pastoral communities in the project target areas. Resources are classified at landscape and patch levels. According to the indigenous knowledge of range management, the type of soils and vegetation are important basis for rangeland classification. Rangeland classification is also based on the suitability of different landscapes for livestock management. Grazers and browsers have different preferences and hence, the different landscapes used differently. The livestock performance in the project target areas is a good indicator of rangeland suitability. Suitability of landscape is expressed by its capacity for grazing, which is the ability of the rangeland to support high stocking densities without causing degradation. Indigenous rangeland management in the project target areas is based on division of herds into mobile and non-mobile herd management systems. Annual grazing cycle by the two types of management systems involves herd movements between the wet and dry seasons, as well as drought year grazing rangelands (Oba and Kotile 2001).[21]

Livestock management

The pastoral communities in the project target areas have their own experiences and knowledge, which they have used for generations to manage natural resources including water, rangelands, livestock and conflict management. The major coping mechanisms and indigenous knowledge of the pastoral groups in the project target areas are migration, herd management strategies that include maintenance of female dominated herd composition, herd diversification, keeping of large herd size and provision of supplementary feed where available (Oba and Kotile 2001).

Access to basic services

The project target areas are regarded as typical marginalized areas. Access to basic infrastructure and social services (road, tape water, education, health, electricity, and communication) is not only significantly low as compared to the national standards but mostly non-existent. There is no access to private tape water and electricity in all the rural areas within the scope of the project target while access to communication (mobile network) is largely limited. Likewise, in all the project target areas, there is no road infrastructure connecting rural kebeles and woredas. Despite relative access to first cycle (grade 1-6) elementary school, the literacy rate in all the project target areas is very low. According to the 2011 Ethiopian Demographic and Health Survey (EDHS), the overall literacy rate in Afar and Somali regions was about 14% and 16%, respectively. Even then, in both regions, there is considerable variation by gender. The literacy rate in the pastoral communities in Borena and South Omo zones is the lowest not only relative to the national average but also relative to the other project target areas: 11.6% and 6.3%, respectively. Health station with primary health-care services such as anti- and post-natal care exists, but service provision is so poor due to lack of health professionals.

The above stated baseline conditions show, even by the standard of Ethiopia, the pastoral communities in the project target areas have the lowest access to basic infrastructure and social services such as road, education, health, water, electricity, telephone and market. More importantly, they have a very low representation in the national political processes (Solomon 2020; WaLRC 2015). Owing to these socio-economic differentials, the pastoral communities in the project target areas are characterized by frequent drought with high livestock mortality which often results in threatening viability of pastoral

[21]Oba, G and Kotile, D. (2001). Assessments of landscape level degradation in southern Ethiopia: Pastoralists versus ecologists. *Land Degradation and Development* 12: 461- 475.

livelihood, famine and deaths in human population. This fact justifies that the pastoral communities in the project target areas are the most marginalized group of people in Ethiopia.

Traditional conflict resolution mechanism

All the pastoral communities in the project target areas have strong traditional conflict resolution mechanism.

In the Somali pastoral group, conflict is managed by the customary system of the *mag* which involves consultation and open discussions between the disputant parties. Mediation is carried out by a person or persons of high social standing, commonly chiefs or elders, who use their social legitimacy and facilitative skills. Under Somali custom, elders are the key actors in the process of ending hostilities and negotiating agreements between disputing parties. The *guurti* elders (a council of clan elders that traditionally presides over a community) function as judge and jury and their decisions are largely adhered to and respected. This clan's process of conflict resolution within the indigenous institution also focuses on reconciliation, stability, harmony, and safety; and tries to reconcile individuals and groups based on their cultural norms, values, and practices. The institutional leaders impose different punishments on perpetrators based on the laws, rules, and regulations of the indigenous institution (Tenaw 2016). The Borena and Guji pastoralist communities have developed elaborate customary organizations that serve the joint purposes of resource management, social security and conflict resolution. The *Gadaa* institution is a typical example that intertwines the objectives of resource management with the maintenance of peaceful coexistence. The *Gadaa* conflict resolution system comprises different socio-cultural institutions: namely, *jarsa biya*, *aadaa, seera* and *safuu.* Whenever two groups compete for the same resource or enter into conflict for any other reason, the case is referred to *jarsa biya* and the mediation process involves the Gadaa traditional system.

The *Denb* system is the traditional conflict resolution system commonly practiced by the pastoral communities in South Omo zone. *Denb* is not only a traditional way of conflict resolution. It is performed by the *Balabats* and community elders at specific places reserved for rituals of *Denb*. The *balabats* are not only political and secular leaders, but also religious fathers of the ethnic group. The *balabats* perform religious rituals or "*denb*" to communicate with and beg their creators. They pray for their supernatural power to bring them rain, make their harvest good, have a bright year, get someone cured from disease and sickness, and solve interpersonal conflict.

4 PART FOUR: POTENTIAL E&S RISKS AND IMPACTS AND MITIGATION MEASURES

Part four of the ESMF presents, first the potential positive environmental and social impacts of the project. Next, identifies anticipated environmental and social risks and adverse impacts associated with the project.

4.1 Potential Positive Environmental and Social Impacts

Potential positive environmental impacts

The project supports the Green, Resilient and Inclusive Recovery (GRID). The GRID approach posits that poverty and climate change are interrelated and need to be addressed simultaneously and systematically. The risk finance component leverages digital and satellite technology to help pastoralists adapt to climate change which brings increased climatic uncertainty. Instead of relying on humanitarian assistance which arrives too late, pastoralists would receive insurance payouts at the onset of drought allowing them to purchase supplies to keep their animals alive. The entire Component 1 is expected to generate adaptation climate Co-Benefits. Also, as livestock can be an important contributor to greenhouse gas (GHG) emissions, Component 2 will facilitate the carbon financing system.

Potential social impacts

- Increase in income of the local pastoralists and agro-pastoralists resulting from DRIVE project interventions: improve the knowledge of the pastoralists on financial literacy and entrepreneurial skills to commence a new or develop the family livestock business already at hand; and addresses local pastoralists' weak and dysfunctional linkages to the livestock value chain to make grass-fed meat production attain its full potential income generation.
- Increase of access to market for the local livestock producers through the DRIVE project interventions: improve the access of local livestock producers to quality infrastructure and transpiration logistic services for the compliance of the standard of export markets, identification and development of local livestock value chains for entering new export markets, and creation of market networks between the local livestock producers and international buyers.
- Benefits to the vulnerable groups such as women, youth and pastoral households. For instance, the project promotes for the equal opportunity of women through its financial education and outreach programs (under Component 1) that address the existing gender gaps in the project target communities. Likewise, the seed capital (under Component 2) gives special consideration to pastoral households, women and youth excluded from access to formal credit service.
- Encourage pastoralists to build up savings to address moderate drought years, and to invest in a drought index insurance product providing protection for severe drought years.
- Provide rapid insurance payouts at the onset of a drought, which are faster than humanitarian assistance and allow pastoralists to keep their animals alive. Enable the use of satellite technology that monitors the conditions of pasture on the ground such that when the level of pasture falls below a certain level, the insurance payout is triggered automatically, and pastoralists receive payouts directly through mobile money.
- Promote business activities with significant impact for the women's economic empowerment in the pastoral and agro-pastoral areas. Increase of women's income through intervention of milk value chain which the women in the pastoral areas engage in as the main actors: women's access to seed capital from the DRIVE project and facilitation of access to credit from financial institutions, scale-up of such businesses and provide jobs and increase of income for the local women.
- Increase the knowledge of the pastoral and agro-pastoral households' financial literacy for better household saving habit and income management for productive economic activities.

4.2 Anticipated Environmental Risks and Adverse Impacts

Given the activities of the subprojects under Component 2 of the DRIVE project (refer to ***Annex C***), the overall potential environmental risks and impacts of the project is assessed as substantial that need the

project the preparation of the necessary environmental and social assessments in order to put the project in to implementation. The findings that follow provide the key potential environmental risks and impacts of the project.

Environmental Risks and Adverse Impacts

Pressure on local resource use

The livestock value chain and trade facilitation component of the project will cause a significant use of local resources, particularly water and energy. Export-based animal fattening and milk production necessarily depend up on the use of large amount of fresh water for feeding and cleaning of enclosure. The activities of upgrading quality infrastructure such as the establishment of testing labs will depend on the use of electric power. The potential pressure of the activities of the livestock value chains such as processing industries on local resource is even more. That is because, the operation of the livestock processing industries necessitates the intensive use of water as well as energy. Given the critical shortage of water and energy supply in the target areas, thus, the project has significant potential cumulative and incremental impacts on the need and use of these resources by the project-affected communities.

Greenhouse Gas (GHG) emissions

The DRIVE project involves investment in large-scale or export market-based livestock production. This may lead to significant Greenhouse Gas (GHG) emissions. This is mainly due to methane and nitrous oxide emissions, two particularly potent GHGs, predominantly linked with enteric fermentation and animal manure. Other project-related activities that may have potentially significant emissions of greenhouse gases include the transportation facilities, large-scale fodder plantation, deforestation due to project-related land acquisition or land use practice, and waste generated from different activities. Likewise, the GHGs may be generated from direct emissions from project-related facilities within the physical project boundary and indirect emissions associated with the off-site production of power used by the project.

Water pollution

Obviously, large-scale or commercial-based livestock production system in the project will generate large volume of animal wastes. In relation with this, the improper management of livestock wastes (manure) can significantly cause surface and groundwater pollution. Water pollution from animal production system in the project can be by direct discharge, runoff, and/or seepage of pollutants to surface or ground water.

Likewise, nitrogen and phosphorus occur naturally and play a major role in the health of aquatic and other ecosystems. However, when these elements enter the environment (air and water bodies) in excessive amounts through the project-related activities, they have the potential to pollute the air, groundwater, and waterways, causing serious environmental problems. The primary sources of nutrient pollution may be the use of fertilizer (e.g. in fodder production), open discharge of animal manure, and runoff wastewater from commercial-based livestock production and processing industries.

Air pollution

The livestock production may be the source of wide-ranging environmental risks and impacts contributing to air pollution. Large-scale livestock production means animals are raised in confinement. This can significantly affect air quality through emissions of gases (ammonia and hydrogen sulfide), particulate matter (PM), volatile organic compounds (VOC), hazardous air pollutants, microorganisms,

and odor. Also, liquid (e.g. sewage) and solid (e.g. the residues) wastes from livestock processing industries such as abattoir can be significant sources of air pollution either through emission or odor.

Waste generation

The activities of commercial-based large-scale livestock production system, operation of the livestock processing industries and quality infrastructure service provision will obviously cause the generation of all the three types (solid, liquid and gaseous) of waste. Besides, the type of waste generation in each of these project activities may comprise hazardous (e.g. chemical wastes from upgrading quality infrastructure and sewages from livestock processing industries) as well as nonhazardous wastes.

Anticipated risks and impacts of pest use

The implementation of all the three subprojects under Component 2 of the DRIVE project will involve the use of pests. The finding of the ESMF highlights that potential risks and impacts from the use of pests can be raised on a variety of ways including new land-use development or changed cultivation practices (e.g. large-scale fodder plantation) in the project areas, development of veterinary facilities, cattle dips, use of pests for animal for the control of insects, arachnids or other pests in or on their body, and pesticides may be applied by livestock processing industry such abattoir to raw materials and products to protect the item from deterioration during storage and transport. Thus, health and environmental risks and impacts from the use of pesticides can be envisaged:

- ***Potential health related risks and impacts*** through toxicity of the product, intensity of use, and mode of application; lack of knowledge by the users about the product and its associated hazards; lack of occupational safety and risk reduction methods for persons handling and using pests; exposure to toxic substances due poor storage facilities or inappropriate disposal system; and risk of residues on treated food products.

- ***Potential environmental related risks and impacts*** through adverse impacts on agro-ecosystem and beneficial non-target organisms (natural enemies of potential pets, pollinators, ants, earth worms, etc.); impacts on aquatic organisms and wildlife; risk of unintended exposure (drift, spills) and behavior and toxicity of break down products.

Community Health and Safety (CHS) risks and impacts

CHS risks and impact due to project activities, equipment, and infrastructure can be anticipated from different perspectives: (a) risks of communicable diseases from project workers to local communities; (b) community health risks from exposure to environmental pollution (e.g. the potential for community exposure to waterborne diseases, hazardous materials and wastes); (c) Increased traffic and road safety risks due to facilitation of transportation logistics by the project; and (d) health risks from project activities may differ within communities, depending on various factors that can contribute to vulnerability, including age, gender, status, physical or mental illness or disability, poverty or economic disadvantage, or dependence on unique natural resources.

Anticipated risks and impacts on habitats and biodiversity

Project-related land acquisition and activities may have direct, indirect and cumulative risks and impacts on habitats and the biodiversity they support through:

- ***Conversion:*** These may include habitat loss, degradation and fragmentation; invasive alien species, overexploitation, hydrological changes, nutrient loading, pollution and incidental take, as well as projected climate change.

- ***Changes in ecosystem services:*** Project-related land acquisition, land use practices and operation of activities may adversely impacts on the vital ecosystem services (provisioning services, regulating services, cultural services, supporting services) that are provided by the biodiversity and living natural resources to the project-affected communities.

Potential Social Risks and Impacts

The findings of the ESMF reveal the social risks and impacts of the project are expected both from the activities in Component 1 and Component 2. Further, the overall potential social risks and impacts of the project are assessed as substantial requiring the project the preparation of appropriate social management plans in order to implement the project. The sub-sections to follow present the summary of the anticipated social risks and impacts of the project.

Income disparity

The project intends to target certain groups within the project-affected communities rather than extending to all members. That means the project services makes distinction between beneficiaries and non-beneficiary groups within the same community or area. This may create or exacerbate the Income disparity among beneficiaries and non-beneficiaries of the project.

Social exclusion

The planning and implementation of the project services and benefits may exclude vulnerable groups such as women and girls and people with disabilities. For instance, the long standing patriarchal socio-cultural and economic system in the project target pastoral communities may discriminate against women and girls during sup-project preparation, community engagement or in benefiting from the project services. This may further reinforce the existing social exclusion.

Potential labour risk assessment

- *National legal and institutional gaps:* The review of the exiting national labour laws showed gaps in providing the labour management procedures specifically apply to the employment opportunities created by the DRIVE project and the different categories of the project workers (direct workers, contracted workers, primary supply workers and community workers). This may seriously jeopardize the working conditions and management of project worker relationships as set out in ESS2.
- *Child labour:* as shown in the social baseline conditions of the project target areas, the rate of children school enrollment is exceptionally low. The availability of large number of off-school children coupled with the income problem of the pastoral households in the project areas may cause or exacerbate risks of children labour. Given this pushing factor, irresponsible private investors may seek to make the advantage of hiring cheap child labour.
    - *Underage employment:* A child over the minimum age and under the age of 18 may be employed or engaged in connection with the project activities in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.
    - *Labour influx/massive migrant workers:* There are possible risks of labour influx/massive migrant workers into the project implementing areas due the substantial number of employment opportunities generated from both the activities of Component 1 and Component 2 of the project.
    - *Human trafficking:* Given that most parts of the project areas are located along the borders connecting Ethiopia to the neighboring counties and the borders are the major international

migration routines, the problem of human trafficking is expected to be significant. What is more, the labour influx and inter-country transportation facilities associated with the implementation of the DRIVE project may facilitate human trafficking.

- *Occupational Health and Safety risks and impacts:* OHS risks are expected due to the project environmental or working conditions (for example, working at heights or in confined spaces, excessive hours of work, night work, oxygen-deficient environments, excessive temperatures, improper ventilation, poor lighting, faulty electrical systems or trenches); materials (for example, chemical, physical, and biological substances and agents); or work processes (for example, use of tools, machinery, and equipment).

Risks of involuntary resettlement

No potential adverse resettlement impact is seen for Component 1. But the implementation of all the three sub-projects under Component 2 requires land acquisition or local communities' restriction of access to natural resources with risks of involuntary physical and economic displacement.

- *Involuntary economic displacement:* This may take different risks and impacts. First, it may involve the loss of agricultural, residential and commercial lands and assets on it. Second, project-related land acquisition may limit access to and use of other resources including communal property and natural resources such as water sources, forests, and grazing land. Third, involuntary displacement may cause the loss of the comparative economic advantages associated with the location of the agricultural, residential and commercial lands dispossessed. Fourth, involuntary displacement would cut off people's mutual cooperation and social capital with vital roles in making a day-to-day economic living. Fifth, women, children, and other vulnerable groups would suffer a disproportionate adverse economic risks and impacts. Sixth, forced displacement would put an economic pressure for the receiving communities as well. The cumulative impacts of these economic displacements will be the loss of the primary means of earning and, thus, impoverishment of the displaced individual or people.

- *Involuntary physical displacement:* Project-related land acquisition or restrictions on land use may cause the physical displacement or relocation of people into a new residential site or environment. Owing to involuntary physical displacement, the project affected persons or communities may be relocated to environments where their productive skills are less applicable and the competition for resources is greater, social networks may be weakened; kin groups may be dispersed; and cultural identity, traditional authority, and the potential for mutual help may be diminished or lost.

Anticipated risks and impacts to Underserved Communities (UCs)

Given the differential vulnerability associating with the historical, socio-economic and political inequalities, harsh living environment with limited natural resources, and means of livelihood that depends on communal access to natural resources (particularly, land and water), the Ethiopian government recognizes the pastoral communities in Somali, Afar, parts of Oromia and SNNPR as underserved communities. This classification includes the pastoral communities of Somali, Afar, Borena and South Omo in the target of the DRIVE project. Risks and impact to these underserved communities are anticipated from both the project activities in Component 1 and Component 2:

- *The differential vulnerability of the project-affected underserved communities:* due to their collective identity and attachment to land under traditional ownership or customary use or occupation, the project-affected underserved communities may be differentially vulnerable to the loss of, alienation from or exploitation of their land and access to natural and cultural resources resulting from project-related land acquisition or restriction on land use.
- *Undesired contact and conflict of cultural norms:* there are remote pastoral communities with limited external contact or people in voluntary isolation in the project target areas. Undesired contact with these people (due to service provisions (Component 1) and livestock value chains interventions (Component 2)) may lead to a significant adverse socio-cultural impact on them. For example, the massive migrant workers to project target areas may undermine the language, cultural practices, institutional arrangements, and religious or spiritual beliefs which the people in voluntary isolation view as essential to their identity or well-being. Also, as these groups of people are likely to defend undesired contact with the migrant workers, that may lead to conflicts and instability in the project areas.
- *Differential gender risks:* due to a strong patriarchal system in pastoral communities, the implementation of the DRIVE project may exacerbate the existing gender inequalities. For example, women may be denied access to financial literacy training as that is culturally exclusive to women and, thus, may further exacerbate the discrimination against women. Also, the exceptional low level of awareness and massive labour influx may put women in the pastoral communities at higher risk of GBV.

GBV Risks

- *Increasing incidence of SEA:* Women and girls of the project-affected communities may experience increasing incidence of SEA. It is likely that the DRIVE project will introduce benefits or services to the project-affected communities, either momentarily or indefinitely. In such case, project workers may broker access to the benefits or services that are financed through the project. The project worker may use this differential power to extract sexual gain or sexually exploiting the women and girls project beneficiaries.
- *SEA in hiring, employment and retention practices:* Hiring and employment practices of women in different employment positions in the project—from skilled labor within contractors to community engagement officers—can expose women and girls to incidents of sexual exploitation (pressure to perform sexual acts in exchange for work), harassment, or violence
- *GBV risks related to changes in the project-affected communities:* Obviously, the implementation of the DRIVE project will create changes in the project-affected communities and can cause shifts in power dynamics between community members and within households. Male jealousy, a key driver of GBV, can be triggered by labor influx on the project when workers are believed to be interacting with the local community women. Hence, abusive behavior can occur not only between project staff and those living in and around the project site, but also within the homes of those affected by the project
- *Security posed GBV risks:* Both physical security measures and security guards can have particularly significant impacts on women, who are likely to be traversing distances for domestic tasks. They may be disproportionately affected by the presence of (typically male and potentially armed) security guards, whom they may encounter daily in following their routine. In some cases, women may be subjected to gender-related harassment or intimidation or may be the victims of sexual violence.

- *Low awareness of the project-affected communities on GBV:* The project target pastoral areas where the educational status of the local community members in general and women in particularly is low. Lack of awareness on GBV and associated legal rights may create conducive situation to increase the risks and impacts of GBV.

Project Induced Security Risks

- *Conflict between the beneficiaries and non-beneficiaries of the project:* The project intends to target certain groups within the project-affected communities rather than extending to all members. That means the project services makes distinction between beneficiaries and non-beneficiary groups within the same community or area. Consequently, conflict of interest may occur between those who do and do not have access to the project service in question creating a new or exacerbating the existing group conflict in the local community.
- *Conflicts/tensions between community and project security personnel:* The nature of some project activities (e.g. construction works) may necessitate deploying security personnel whether hired by private investors/contractors or assigned by government. Similarly, some of the project activities (e.g. preventing access to natural resources for the operation of project activities) for which the deploying of security personnel required are likely to be activities that generate concerns of grievance by the project-affected communities. Consequently, conflict and tensions between the local community and project security personnel may occur.
- *Conflict that may arise due socio-cultural differences:* The project will engage workers in the form of direct workers, contractual workers and primary supply workers a different socio-cultural background from the project target pastoral communities. That may serve as the source of conflict between the local pastoral communities and project workers in their daily life interaction or while providing project services.
- *Security related allegations or incidents:* The way in which both the public and private security personnel interact on a daily basis with the project affected communities and project workers may appear threatening to them or may lead to conflict. This may cause unlawful and abusive acts by security personnel against the project affected communities and project workers.
- *Contextual Security Risks:* There are Contextual Security Risks in and around some project target areas that may have negative effect on the implementation of the project. For example, in one of the project target areas Afar, the risks from the current tensions, conflict and instability associating with the war with its neighboring region Tigray may persist to hinder the implementation of the project.

Proposed Mitigation Measures

The project ESMF will apply a mitigation hierarchy. The mitigation hierarchy represents a systematic and sequenced approach to managing the potential environmental and social risks and impacts of the project identified in Part Four. It applies the following mitigation steps:

- ***Step 1 Anticipation and Avoidance:*** Avoidance is the most preferred form of mitigation. As a first step, the environmental and social assessment will identify and evaluate technically and financially feasible alternatives (including location, technology, and or alignment options). When determining technical and financial feasibility of alternatives, both cost and benefits should be considered. The evaluation should impact on project design enabling the Borrower to choose alternatives that anticipate and avoid adverse environmental and social risks and impacts.
- ***Step 2 Minimization:*** Where avoidance is not possible, the environmental and social assessment will identify specific actions to minimize or reduce adverse environmental and social risks and

impacts that are likely to arise throughout the project life cycle. For example, this may include reducing impacts on the climate by choosing alternatives with lower carbon emissions; or selecting infrastructure, equipment, and technology options that support efficient use of resources (including energy and water) and reduce generation of wastes throughout the project life cycle.

- ***Step 3 Mitigation:*** To manage the residual risks and adverse impacts (after the avoidance and minimization steps), the environmental and social assessment will identify mitigation measures by establishing specific actions to ensure the project will meet the requirements of applicable ESSs 1-8 and comply with relevant national laws and regulations.
- ***Step 4 Offset or Compensation:*** Where avoidance, minimization, or mitigation is not adequate to manage significant adverse risks and impacts, it may be appropriate to design and implement measures that compensate/offset for residual risks and impacts. These measures do not necessarily eliminate the identified adverse risks and impacts, but they seek to offset them with comparable positive ones. Environmental offsets are a cost-effective way to ensure that even though damage will occur, there is compensation for that damage. Even within environmental offsets, there is a hierarchy that is followed. *Restoration, creation, enhancement, and preservation* comprise this hierarchy .

Table 4 :*Proposed Environmental and Social Risks Mitigation Measures*

Anticipated Environmental Risks or Impacts	***Proposed Mitigation Measures***
Pressure on local resource use (water and energy)	• Exploit underground water rather than competing for the scare fresh/tap water. Except in Borena, the other project target areas have huge potential of underground water that could be developed at the individual investor's level. • The project will avoid the manufacture, trade and use of chemicals and hazardous materials subject to international bans, restrictions or phase-outs unless for an acceptable purpose as defined by the conventions or protocols or if an exemption has been obtained by the government of Ethiopia, consistent with government commitments under the applicable international agreements. • The project will minimize and control the release and use of hazardous materials. The production, transportation, handling, storage, and use of hazardous materials for project activities will be assessed through the environmental and social assessment. The project will consider less hazardous substitutes where hazardous materials are intended to be used in manufacturing processes or other operations. • Applying efficient water conservation strategies such as avoiding wastage of water, and water recycling or reuse (e.g. treating and reuse of waste water). • Storm/rainwater harvesting and use. Despite shortage of rain in the project areas, those enterprises or private investors engaged in large-scale livestock production could use large reservoir to store water from storm/rainwater harvesting at once. • Encouraging the private investors engaged in any project activity with intensive use of energy to explore alternative energy sources rather than competing for the limited local energy supply. The project target areas have huge potential for solar energy, wind energy and geothermal energy. If cooperatively work with the Ethiopian Electric Corporation, exploring these alternative energy sources could be cheaper and efficient.

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	• Applying energy saving technologies and equipment in running the project activities under upgrading quality infrastructure. • Regular comparison and monitoring of energy flows with performance targets to identify where action should be taken to reduce energy use. Preparation of mass and energy balance accordingly. • Devising strategies for energy conversion system efficiency improvements. For example, a meat packing or diary industry could save energy by minimizing the number of machines to meet loads. Like it is typically more efficient to run one machine at 90% of capacity than two at 45%.
Greenhouse Gas (GHG) emissions	• Develop biogas technology (and associated biogas storage safety measures) to use the animal manure for energy generation. Applying such technology has other benefits in addition to reducing GHG emissions. It provides an alternative source of energy for those private investors engaging in large-scale livestock production and thereby reduced pressure on local energy supply. Also, the residue from biogas energy production can be as a natural fertilizer. • Promoting palatable fodder production. This could reduce the amount of manure generated per head of the cattle. Besides reducing the GHG emission palatable fodder is highly efficient in fattening the animals and contributes to the quality of meat. • The project should put in place a system of carbon financing and annual GHG accounting if applicable. One way could be supporting the Green, Resilient and Inclusive Recovery (GRID). The risk finance component of the project can leverage digital and satellite technology to help pastoralists adapt to climate change which brings increased climatic uncertainty. The entire Component 1 of the project is expected to generate adaptation climate Co-Benefits that simultaneously address the issues of economy and environment. • Use of technologies and strategies that could avoid or reduce GHG emissions. Example of such technology or strategy includes Carbon capture and storage technologies; protection and enhancement and increased use of renewable forms of energy; and protection and enhancement of sinks and reservoirs of greenhouse gases. • Limitation and/or reduction of methane emissions through recovery and use in waste management.
Water pollution	• Putting in place proper manure management which include several ways including avoid direct discharge and avoid open land discharge through developing proper septic storage and applying biogas production technologies. • The volume of livestock manure generation can be reduced through improving animal feeding system (e.g. using palatable feeds). • Fence animals out of riparian areas located next to surface waters. Water from lakes and streams can be used for livestock purposes by piping into approved water holding facilities like tanks or nose pumps. • Maintain grass buffer strips near surface water. Provide a grass buffer between surface waters, pasture and cropland.

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	• Consider using retention ponds or lagoons for runoff/waste collection from feedlots.
Air pollution	• All of the mitigation measures listed for water pollution works for air pollution as well. • Emissions from the project activities or facilities do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards by applying national legislated standards, or in their absence, the current WHO Air Quality Guidelines. • Requirement of regular maintenance of equipment that generates air pollutants, air emission levels following relevant WBG EHS Guidelines
Solid waste and wastewater generation	• Establish waste management priorities at the outset of activities based on an understanding of potential Environmental, Health, and Safety (EHS) risks and impacts and considering waste generation and its consequences. • Establish a waste management hierarchy that considers prevention, reduction, reuse, recovery, recycling, removal and finally disposal of wastes as set out in the ESF requirements. • Water use efficiency to reduce the amount of wastewater generation. • For activities related to livestock processing industries apply process modification (e.g., applying technologies that minimize waste generation and avoid the use of hazardous materials that generate severe pollutants). • Identify opportunities to prevent or reduce wastewater pollution through such measures as recycle/reuse within their facility, or input substitution. • For those private investors with the capacity to afford (e.g. those engaged in livestock processing industries), application of wastewater treatment techniques to further reduce the load of contaminants prior to discharge or complete treatment of wastewater for reuse. • Treatment of wastewater effluents requires to comply with the WBG EHS guidelines. • Understand the quality, quantity, frequency and sources of liquid effluents in its installations. This includes knowledge about the locations, routes and integrity of internal drainage systems and discharge points.
Risks and impacts of pesticide use	• Prioritize the use alternative non-chemical pest management techniques (biological controls, *Cultural and crop or livestock management controls, genetically based controls)* over chemicals. • The use of pesticides in the project should be allowed only if: they will have negligible adverse human health effects; they will be shown to be effective against the target species; and they will have minimal effect on non-target species and the natural environment. • Screening pesticides: the use of any pesticide should be based on an assessment of the nature and degree of associated risks, taking into account the intended users. • If pesticides are applied for whatever activities of the project, training should be given for personnel handling and applying pesticides. • The use of formulated pesticide products that meet the criteria of carcinogenicity, mutagenicity or reproductive toxicity as set forth in the GPMP of the project. by

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	relevant international agencies (e.g., FAO) should be avoided. • The project will avoid the manufacture, trade-in and use of pesticides/herbicides subject to international bans, restrictions or phase-outs. • Project beneficiaries in need must ensure that all pesticides used are manufactured, formulated, packaged, labeled, handled, stored, disposed of, and applied according to relevant international standards. The MoA will monitor the case. • In the procurement of any pesticide for use in the DRIVE project, the MoA will assess the nature and degree of associated risks, taking into account the proposed use and the intended users. • The use of any pesticide should be based on an assessment of the nature and degree of associated risks, taking into account the intended users. • Appropriate storage facilities, protective gear and materials for storekeepers to handle emergencies and Material Safety Data Sheets (product information with emergency instructions). • The mitigation measure proposes the following additional criteria apply to the selection and use of pesticides/herbicides: (a) they will have negligible adverse human health effects; (b) they will be shown to be effective against the target species; and (c) they will have minimal effect on non-target species and the natural environment. The methods, timing, and frequency of pesticide application are aimed to minimize damage to natural enemies. Pesticides used in public health programs will be demonstrated to be safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them; (d) their use will take into account the need to prevent the development of resistance in pests; and (e) where registration is required, all pesticides will be registered or otherwise authorized for use on the crops and livestock, or for the use patterns, for which they are intended under the project.
Anticipated risks and impact on habitats and biodiversity	• The biodiversity management plan (BMP) underpins that the project operation should be in line with the principle of the sustainable means of living natural resources and ecosystems and ESS6 requirements. • The implementation of the project activities should avoid the intentional introduction of invasive alien species. • Based on the findings of the environmental and social assessment, the ESMF proposed diverse biodiversity management activities including site-specific habitat restoration, enhancement, or improved management; community benefit-sharing; livelihood restoration activities (to mitigate any negative socioeconomic impacts from newly restricted access to natural resources, in accordance with ESS5); and species-specific management interventions. • Prohibitions or specific restrictions for project civil works contractors. These may cover prohibition of clearing or burning of natural vegetation; off-road driving; hunting and fishing; wildlife capture and plant collection; purchase of wildlife products; and/or free-roaming pets (which can harm or conflict with wildlife).

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	• Seasonal or time-of-day restrictions may also be needed to minimize adverse biodiversity impacts during construction or operation. Examples include limiting blasting or other noisy activities to the hours of the day when wildlife are least active; and timing of construction to prevent disturbance during the nesting season for birds of conservation interest.
Labour risks	• The ESMF proposed that it is a good practice for the project to avoid or eliminate sources of hazards to project workers' health and safety, rather than simply addressing the hazard through preventive and protective measures such as personal protective equipment. • When it is not feasible to avoid or eliminate the hazard, appropriate protective measures are included in the project's OHS measures, such as controlling the hazard at its source through the use of protective solutions (for example, exhaust ventilation systems, isolation rooms, machine guarding, acoustic insulation), and providing adequate personal protective equipment at no cost to the project worker. • Measures relating to occupational health and safety take into account the requirements of ESS2 and national law requirements on OHS as set out in the project LMP (***Annex 3***) and workplace conditions as they apply to the project. • Project implementing organization and contractors are required to put in place a system for regular review of occupational safety and health performance and the working environment. These many include identification of safety and health hazards and risks, implementation of effective methods for responding to identified hazards and risks, setting priorities for taking action, and evaluation of results. • Services provided to project workers (for example, canteen facilities, nursing facilities, or a camp store on a construction site), whether directly or through a contractor, are provided in a nondiscriminatory manner, and comply with national law and EHSGs, particularly in relation to quality, security, and safety. Where there are charges to project workers for such services, these should be reasonable with reference to local market prices.
Community Health and Safety Risks	• Addressing community health and safety risks proposes measures in all phases of the project life cycle, for example, incorporating safe road crossings into project design and implement throughout the project life-cycle; establishing workers' camps separated from local communities with strict protocols for interaction with local communities in order to avoid project impacts from labor influx; implementing sensitization and specific mitigation measures for social impacts from labor influx during construction or service provision of the project; establishing emergency-response planning and monitoring for pollution or other incidents during operation; putting in place protocols for temporary blasting during demolition at the reinstatement or restoration phase; or establishing health clinics. Local health authorities should ensure appropriate processes are in place for community feedback and taking any necessary action. • The use of skilled trainers to raise awareness among project workers of the risks, expected behaviors, and consequences of violations, communicated through training, and publicized codes of conduct. It may also be important to raise

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	awareness of the risks among community members and local health authorities and inform them about available grievance mechanisms. • Identifying individual groups considered to be vulnerable is an important part of the environmental and social assessment and enables inclusive measures to be incorporated into projects to avoid harm to vulnerable groups and improve project performance. • The project will identify and implement measures to address emergency events/unanticipated incident arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills. • The mitigation measures will be designed to address the emergency event in a coordinated and expeditious manner, to prevent it from injuring the health and safety of the community, and to minimize, mitigate and compensate for any impacts that may occur. • The Emergency Response Plan (ERP) will involve the following procedures, as appropriate (a) engineering controls (such as containment, automatic alarms, and shutoff systems) proportionate to the nature and scale of the hazard; (b) identification of and secure access to emergency equipment available on-site and nearby; (c) notification procedures for designated emergency responders; (d) diverse media channels for notification of the affected community and other stakeholders; (e) a training program for emergency responders including drills at regular intervals; (f) public evacuation procedures; (g) designated coordinator for ERP implementation; and (h) measures for restoration and cleanup of the environment following any major accident.
Involuntary economic and physical displacement	• Avoidance is the preferred approach in accordance with the mitigation hierarchy in ESS1. If avoidance is not possible, a meaningful analysis of possible alternatives that incorporates an estimate of the social and project costs associated with displacement, and that assesses whether the displacement risks and impacts are reasonable and proportionate to the benefits that will be achieved through the project, helps to identify optimal solutions. • A stand-alone RF and RP will be prepared. • Special Restoration Measures for the poor, marginalized and vulnerable Groups/PAP such as women with small children, people with disabilities, female headed households, the elderly and the sick who are required to resettle as a result of project-relative land acquisition.
Risks and adverse impacts to Underserved Communities (UCs)	• In recognition of their differential vulnerability, the project require obtaining Free, Prior and Informed Consent (FPIC) of the affected UCs in circumstances in which project-related land acquisition or restriction on land use will: (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause relocation of the UCs from land and natural resources subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on the affected UCs' cultural heritage that is material to their identity and/or cultural, ceremonial, or spiritual aspects. • Comply with the requirements for chance-find procedures as provided in ESS8.

Anticipated Environmental Risks or Impacts	*Proposed Mitigation Measures*
	• In project activities potentially affect remote groups with limited external contact, the project will take appropriate measures to recognize, respect, and protect their culture, language, and traditional institutions. Also, measures to avoid all undesired contact between the UCs and project workers as the consequence of project implementation. The aspects of the project that would result in such undesired contact will not be processed further. Among appropriate measures include adequate awareness raising activities to project workers about the holistic life of the UCs and contractors need to put in place strict Code of Conduct regarding their workers.
GBV Risks	• Prepare stand-alone GBV Action Plan and Strictly adhere to the provisions set out in the plan.
Security risks	• Engagement with communities about the project's impacts on community safety and security, awareness raising concerning the Code of Conduct commitment and project grievance mechanism, as outlined in the Stakeholder Engagement Plan (SEP) and SMP. Decrease the need for the project security response, that is: a. Make illegal or threatening behavior more difficult and less appealing. Use lower-level security measures to prevent the need for a higher-level response (e.g. higher fencing, greater visual presence of security). b. Understand and mitigate the underlying causes for security risks. Address security risks with a social solution (e.g. reduce community members' trespassing to gain access to a water source by providing a direct route to the water source or by providing a new water source if possible). • Improve the outcome of the project security response, that is: a. Reduce the risk of an inappropriate use of force by creating the conditions for a professional guard force capable of an appropriate and proportional response (such as through vetting, training, strict control of weapons and ammunition, oversight). b. Ensure that Guards have clear guidelines for apprehension and short-term detention. • Reduce the risk of a more severe outcome from the use of force, that is: a. Consider authorization of access to and use of lethal force by the project security personnel to be an exception that must be justified by the level of risk. b. When authorized, weapons and ammunition should be subject to strict protocols and access controls. A stand-alone Security Risks Assessment and Management Plan will be prepared

4.3 Summary Findings from Stakeholder Consultation

Key views and concerns raised by experts and officials

In this ESMF, about 18 environmental and social experts and 8 top officials from different federal to woreda level have been consulted through individual interview from December 8 to 17.

The main discussion points raised for experts and officials on environmental issues include: the possible impacts of large-scale/commercial based livestock investment on the use of local resources (water and energy); the potential generation of greenhouse gases (GHG) and environmental pollution (air, water, soil and eco-system) due the proposed project activities; the potential community health and safety risks (e.g. traffic, road accidents or exposure to hazardous wastes/chemicals) due to the proposed project activities; and the risks of encroaching nationally projected or internationally recognized areas of high biodiversity due to project-related land acquisition. The main discussion points on social issues include: the possible risks of labour movement (such as labour influx, discrimination and unequal opportunity, child labour, and forced labour; the anticipated risks and impacts of involuntary physical and economic displacement associating with project-related land acquisition or restriction on land use; the potential risks and impacts of project-related land acquisition on the Underserved Communities (UCs); and anticipated risks of GBV/SEA/SH associating with the implementation of the proposed project.

The key views and concerns raised on environmental issues are summarized as follows:

Environmental experts invariably anticipated the adverse impacts of the large-scale livestock production on the limited local resources. In line with this, an environmental engineer interviewed from Meat and Dairy Industry Institute explained what is shared by all experts during consultation:

Increasing the milk cows' productivity is only possible at the expense of intensive resource use. For example, to obtain 1 litre of milk, we need to use 7 litres of freshwater for the cow's feeding, bath, and cleaning its enclosure. If a cow provides 20 litres of milk it means that I will consume 140 litres of water per day. This clearly tells us that the more the project targets for the export of dairy products and, thereby, performs to increase the productivity of the milk cows the huge pressure that will put on the local water need and use.

Environmental experts raised the possible problem of Greenhouse Gas (GHG) emissions, particularly due to the activities of large-scale or commercial-based livestock production. A senior environmentalist interviewed in Oromia Regional State Environmental Projection Authority contends the same view:

Livestock generate 4 km manure per day on average. Up to 74% of their manure is methane which is the major type of Greenhouse Gas (GHG). Perhaps, the potential environmental risk due to methane emission by livestock could be visible by comparing it with carbon dioxide. That is, an emission of 1 km of methane is 25 times more environmentally pollutant than an emission of 1 km of carbon dioxide. Similarly, an ox or a cow generate 5 litres of urine per day on average which emission nitrous oxide to the air another major type of GHG. The polluting impact due to the emission of nitrous oxide is even higher than methane. That is, an emission of 1 km of nitrous oxide is 300 times more environmentally pollutant than an emission of equivalent amount of carbon dioxide. These facts clearly show how far higher the potential environmental risk associating with the implementation of the proposed DRIVE project unless proper environmental management is designed alongside.

During consultation, waste generation was the common concerns of the experts. An environmental specialist consulted from Oromia Agricultural Bureau took the leather processing industry to justify the case in point:

The processing of hide and skin depends on the intensive use of water that ends as the generation of a large volume of liquid waste. Whereas the discarded parts of the hide and skin generate solid waste. Yet, chemicals may be used in the soaking process and for preservation. Inappropriate disposal and management of the solid and liquid wastes will cause emission of bad odor with serious air pollution.

The key views and concerns raised on social issues are summarized as follows:
Risks associated with the employment opportunities and movement of large labour force is largely anticipated among the officials and experts consulted. For instance, Strategic Administration Directorate Director in Ministry of Women and Social Affairs, and PIU's Social Safeguards specialist stressed the availability of large number of off-school children coupled with the income problem of the pastoral households in the project areas may cause or exacerbate risks of children labour. Given this pushing factor, irresponsible private investors may seek to make the advantage of hiring cheap child labour. Likewise, based on his experience of large-scale development projects, PIU's Social Safeguards specialist stated the inevitability of high risk of human trafficking. Experts interviewed from the Ministry of Women and Social Affairs underscore an obvious human trafficking, particularly young girls.

Consulted social experts and officials anticipated involuntary resettlement risks and impacts in two major ways due the activities of upgrading quality infrastructure, livestock value chains, facilitation of regional livestock trade, and private investors in livestock production and livestock processing industries that involve land acquisition.

As repeatedly noted by PIU's social experts and officials, loss of land and access to natural resources resulting from project-related land acquisition and land use changes has special risks and impacts on the life of the project-acted pastoral communities. For project-affected pastoral communities, due to their collective identity and attachment to the land, the loss of land or access to natural resources means the loss of common ancestry, social, cultural, economic, and political life.

Informant from the MoTRI identified the risks and impacts of the institutional restructure that is on-going in the MoTRI. He stated the gap of implementation arrangement as follows:
The MoTRI is a newly established organization. The former Ministry of Trade and Industry is divided into two ministerial organizations one of which is the MoTRI and the Ministry of Revenue and Industry (MoRI) is the other one. The new institutional structuring of the MoTRI makes the roles and responsibilities of some position in the organization unclear regarding the implementation of the ESMF. More importantly, according to the new institutional structure, the MoTRI has no mandate to manage some of the project activities. For example, the management of the livestock processing industries falls under the mandate of the MoRI rather than under the MoTRI. Such institutional fragmentation will have an obvious hindering impact to effectively implement the ESMF.

Informants from Regional Trade and Market Bureaus identified another major gap in the existing implementing arrangement. The statement by the Livestock Directorate Director in SNNPRS Trade and Market Bureau would reveal the point here:
The newly introduced institutional structure of trade and regional integration at the ministry level does not exist at the regional, zonal and woreda levels. Instead, the organizational structure of the respective regional, zonal and woreda offices continues with the previous institutional arrangement as trade and market. The discrepancy between the structural organization of the MoTRI and its line regional, zonal and woreda offices will create the gaps as to the institutional roles and responsibilities of implementing the ESMF.

Before directly going to consultation, participants were introduced with the proposed activities under Component 1 and Component 2 of the project. This was followed by description of the potential positive and negative impacts associating with the undertaking of the activities of the project. Finally, the

participants in the community consultation were let to express their views and concerns. The views and concerns raised are summarized into the following key points:

The issue of how the project will select beneficiaries, who will be included and who will be excluded, was the concerned consistently raised by the participants on the consultation. Responses was given to the participants that the project will target pastoralists in groups who have the capacity to become productive. The eligibility criteria are any pastoralist group given that: the group is composed of pastoralists whose main economic activity is livestock rearing; the group is structured around economic activities; the group has the capacity and willingness to engage in commercial activities (e.g. sell livestock for commercial purpose); and the group has the willingness to contribute to the cost of the package of financial services provided. But participants expressed the complaint that most local community member do not meet the eligibility criteria and asked what solution the project will put in place to benefit the wider communities. Some expected solutions such social programs (community investments) were described as the solution and consensus was reached for further community engagement on this concern.

Concerns about waste generation and pollution in association with the performance of the project activities were expressed by the participants. Explanation was given that the WB will not finance any project with irreversible environmental damage. While those project activities with substantial environmental risks will only be commenced after appropriate environmental management plan is devised and its proper implementation is monitored throughout the project lifecycle. Consensus was reached that environmental and social impact assessment will be conducted to measure the types and extent of environmental impacts from the project activities.

Concerns related to loss of land or restriction on use of natural resources due to project-related land acquisition was stressed by members of the underserved communities. Response was given to them that the project will avoid the displacement of underserved communities to extent possible. Otherwise, the project requires obtaining Free, Prior and Informed Consent (FPIC) of the affected UCs in circumstances in which project-related land acquisition or restriction on land use will have adverse impacts on land and natural resources subject to their traditional ownership or under customary use or occupation. Agreement was reached that Target Social Assess will be conducted and active community engagement will be made before any decision is made regarding project-related land question.

Participants expressed concerns about involuntary displacement (physical and economic) due to project-related land acquisition and how the project will go about it. Response was given that the project will consider all possible ways to avoid involuntary physical and economic displacement due to project-related land acquisition. But, if avoidance is not possible, resettlement planning will provide displaced persons with opportunities to participate in development of the plan and implementation of activities intended to improve, or at least restore, their standards of living. Consensus was made that any project activity with the risk of physical or economic displacement will not be commenced without proper resettlement action plan and active engagement of the displaced persons.

5 PART FIVE: PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The environmental and social procedures in the DRIVE require the MoA to carry out an environmental and social assessment of the project to assess the environmental and social risks and impacts of the project throughout the project life cycle. The assessment will be proportionate to the potential risks and impacts of the project, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle. Using the major steps outlined below, the procedures will evaluate the project's potential environmental and social risks and impacts; examine project alternatives; identify ways of improving project selection, siting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project.

5.1 Subproject screening, preparation, approval and implementation

Subproject screening

The first step is the subproject screening. Using the criteria for subproject screening indicated in ***annex B1***, the procedure will develop and adopt a categorization system for subprojects with clearly defined risk categories. In determining the appropriate risk classification, the DRIVE project will take into account relevant issues such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of the MoA (including any other entity responsible for the implementation of the project) to manage the environmental and social risks and impacts in a manner consistent with the WB's ESSs.

Other areas of risk may also be relevant to the delivery of environmental and social mitigation measures and outcomes, depending on the specific subproject and the context in which it is being developed. These could include legal and institutional considerations; the nature of the mitigation and technology being proposed; governance structures and legislation; and considerations relating to stability, conflict or security.

Accordingly, based on the screening process undertaken all subprojects will be screened: (a) against exclusions in the National, WB or International Policies/Laws; and (b) for risk category or the severity and extent of potential environmental and social risks and impacts. For detail, see the information in ***Annex B2***. An environmental and social risk categorization system enables the DRIVE project to monitor and evaluate its exposure to environmental and social risk aggregated at the relevant portfolio level.

Subproject preparation

The second step involves subproject preparation or planning. In line with the identified potential risks and impacts through subproject screening, the preparation of the respective subproject needs to:

- Preparation of the ESIA as per the Terms of Reference for the Environmental and Social Impact Assessment set out in Annex A2.
- On the basis of the findings of the ESIA make an analysis of the alternatives of the different options aimed at selecting the best project alternative considering technical-financial and socio-environmental considerations.

- Where the findings of the environmental and social assessment identified significant social risks and impacts from project activities, develop the appropriate Social Management Plan that applies a mitigation hierarchy which will:
  a) Anticipate and avoid risks and impacts;
  b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
  c) Once risks and impacts have been minimized or reduced, mitigate; and
  d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.
- Where the findings of the environmental and social assessment reveal significant risks and adverse impacts on forests, natural or critical habitats or protected areas of high biodiversity value, the identification of project design solutions will:
  a) Adopt a precautionary approach with the assumption that ecological systems are highly complex, which can make it difficult, if not impossible, to make reliable predictions concerning the longer-term impacts of the project activities. For this reason, precautionary approach depends on the adage *'absence of evidence is not evidence of absence.'* In the precautionary approach, the emphasis is on avoiding actions with potentially harmful (and particularly with irreversible) consequences until there is sufficient information available to properly assess and weigh the alternative project design solutions.
  b) Apply adaptive management practices that include regular monitoring of environmental and social indicators, comparing these with expected outcomes, and revising actions as needed in order to realign the implementation of the project activities with ESS objectives set in the ESMF
- Satisfy the requirements of the Bank's environmental and social standards, WBG EHS Guidelines and GIIP by emphasizing that some subproject situations and mitigation measures will need to be specified more precisely than others (e.g. UCP), either in the application or as an to it.
- Describe the process for ensuring that environmental and social concerns are adequately addressed through the institutional arrangements and procedures used by the project for managing the identification, preparation, approval and implementation of subprojects
- In each case, national and local institutions that will be involved in reviewing and approving subprojects are identified, along with their respective roles and responsibilities. Responsibilities may include issuing approvals or permits for undertaking a subproject, using land, undertaking physical works, withdrawing water, or discharging wastes.
- Emphasize the importance of community participation in subproject preparation, and provides guidance on participation methods.

Appraisal and approval

The third step is subproject appraisal and approval. Once a subproject preparation is done that will subject to the WB's thorough appraisal to approve including, as appropriate:

- Reviewing the information provided in the respective subproject preparation relating to the scale of environmental and social risks, and requesting additional and relevant information where there are gaps that prevent the Bank from and impacts completing its due diligence.

- Reviewing whether the respective subproject preparation designs appropriate ESIA/ESMP consistent with the mitigation hierarchy to address the environmental and social risks and impacts it identified in accordance with the ESSs.
- Reviewing whether the subproject preparation provides a clear description showing the roles and responsibilities of various authorities at different levels, as appropriate (national, regional, district and community) in implementing the proposed ESIA/ESMP.
- The Bank recognizes that the Borrower country Ethiopia may have different levels of information regarding the environmental and social risks and impacts available at the time the Bank carries out its due diligence for approval. In such circumstances, the Bank will assess the risks and impacts of the proposed subprojects based on the information that is available to the Bank, together with an assessment of: (a) the risks and impacts inherent to the type of subproject and the specific context in which the proposed subproject will be developed and implemented; (b) the capacity and commitment of the project implementing organization the MoTRI and its regional and local entities to implement the ESIA/ESMP proposed for the respective subproject in accordance with the ESSs; and (c) the capacity of the MoTRI and its regional and local entities to conduct monitoring on the environmental and social performance during subproject implementation.
- Finally, the Bank will assess the significance of the gaps in the proposed subproject ESIA/ESMP and institutional capacity. Subproject approval will be made in consideration to the potential risk such gaps may present in implementing the proposed ESMP as set out in ESSs.

Subproject implementation

The fourth step refers to subproject implementation. Scrutiny to the steps one to three stated above, the implementation of the subproject will be as follows:

- *Substantial Risk*: Such subprojects require screening, preparation and implementation in accordance with the WB's ESSs, other GIIP and relevant national laws. If the Bank is not satisfied that adequate capacity exists on the part of the project implementing organization, Substantial Risk subprojects will be subject to prior review and approval by the Bank until it is established that adequate capacity exists.
- *Moderate Risk* and *Low Risk* subprojects implementation in accordance with national law and any requirement of the ESSs that the Bank deems relevant to such subprojects.
- If the risk profile of the subproject increases in the course of implementation, for example, because unanticipated resettlement is identified or an emergency incident takes place, the increased risk should be promptly assessed. the Bank will require the MoA to apply relevant requirements of the ESSs in a manner agreed with the Bank. The measures and actions agreed will be included in the ESCP and the implementation of the subproject will be monitored by the Bank.

5.2 Disclosure of ESMF and other ESRM Instruments

The disclosing of project information requires that, before a sub-project is approved, all the proposed ESRM instruments (ESIA, LMP, EMPs, RF, UCP, SEP, SMP and GBV Action Plan) proposed in this ESMF should be disclosed for the project-affected parties and interested parties.

All views will be considered, including those of are disadvantaged or vulnerable individuals or groups. The Borrower will provide stakeholders with access to the following information as early as possible before the Bank proceeds to project appraisal, and in a time frame that enables meaningful consultations with stakeholders on project design:

- The purpose, nature, and scale of the project;
- The duration of proposed project activities;

- Potential risks and impacts of the project on local communities, and the proposals for mitigating these, highlighting potential risks and impacts that might disproportionately affect vulnerable and disadvantaged groups, and describing the differentiated measures taken to avoid and minimize these;
- The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate;
- The time and venue of any proposed public consultation meetings, and the process by which meetings will be notified, summarized, and reported; and
- The process and means by which grievances can be raised and will be addressed.

The project information disclosure will follow different ways. First, the MoA in cooperation with the regional line bureaus will organize project sanitation workshops at the federal, regional and woreda levels. Second, the project environmental and social safeguards in the PIU MoA will cooperate with regional and woreda trade offices to physical reach out the project-affected communities. Then, in the public meeting that comprise clan leaders, elders, representatives of women, youth, vulnerable groups such as people with disabilities and the elderly and others, all the proposed ESMPs will be orally presented in local languages and feedbacks will be received. Third, a copy of each ESMP will be accessible at local level (e.g. at the respective woreda trade offices). Fourth, the MoA will disclose all the proposed ESMPs on its official websites. Finally, all the ESMPs document will be forwarded to the Bank for disclosure at the Public Information Centre of the country office and through the Bank's Infoshop.

For s*ubstantial Risk* subprojects, the Bank will indicate in the Project Appraisal Document the project-related documents that will be prepared and disclosed after Board approval. For each key document, the Bank will provide, where possible, the following details: the objectives and proposed content of the document; the rationale for the timing of preparation; the estimated costs associated with the preparation of the document and its implementation; the source of funding; and the arrangements for preparation. These details and timing for delivery of the document will be set out in the ESCP, as appropriate.

5.3 Requirements of the contractors and private sectors

The implementing organization, the MoA, will require that all contractors engaged on the project operate in a manner consistent with the requirements of the ESSs, including the specific requirements set out in the ESCP. The MoA will manage all contractors in an effective manner, including:

- Assessing the environmental and social risks and impacts associated with such contracts;
- Ascertaining that contractors engaged in connection with the project are legitimate and reliable enterprises, and have knowledge and skills to perform their project tasks in accordance with their contractual commitments;
- Incorporating all relevant aspects of the ESCP into tender documents;
- Contractually requiring contractors to apply the relevant aspects of the ESCP and the relevant management tools, and including appropriate and effective noncompliance remedies;
- Monitoring contractor compliance with their contractual commitments; and
- In the case of subcontracting, requiring contractors to have equivalent arrangements with their subcontractors.

5.4 Annual review and reporting requirements

Annual reports

Using the indicative annual report form given in ***Annex B3***, the local project implanting entity of the MoA is normally required to report annually on the Project activities during the preceding year. The purpose of annual report is to provide:

- **A** record of project and subproject transactions;
- A record of experience and issues running from year-to-year throughout the project that can be used for identifying difficulties and improving performance; and
- Practical information for undertaking an annual review.

Annual review

It is expected that the annual review will be carried out by an independent local consultant or other service provider that is not otherwise involved in the project. The purpose of the annual review is two-fold:

- to assess compliance with project ESMF procedures, learn lessons, and improve future ESMF performance; and
- to assess the occurrence of, and potential for cumulative impacts due to project-funded and other development activities.

The third-party annual reviews will be a principal source of information to project management for improving performance, and to Bank supervision missions. Thus, annual reviews should be undertaken after the annual report has been prepared and before Bank supervision of the project. Guidance on undertaking annual reviews is provided in ***Annex B4*** of the ESMF.

6 PART SIX: ESMF MONITORING AND REPORTING PROCEDURES

The DRIVE ESMF expects that monitoring is undertaken at the subproject implementation level to follow-up the extent to which the mitigation measures are achieved. The MoA will ensure that adequate institutional arrangements, systems, resources and personnel are in place to carry out the monitoring of the subprojects. Part Six of the ESMF describes on topics of relevance in relation to monitoring and reporting procedures.

6.1 Environmental and social monitoring indicators

Determining the environmental and social monitoring indicators depends on a number of factors. In turn, the selection and application of the appropriate monitoring indicators depends on the nature and extents of specific environmental and social management plan. Backdrop to this, the next description provides the general frameworks that help to decide on the appropriate environmental and social monitoring indicators for the DRIVE project.

- **ESMF performance monitoring*:*** this monitoring indicator is used to track the on-going progress for all ESMPs (i.e., LMP, PMP, RAP and UCP). This will normally include recording information to track performance and establishing relevant operational controls to verify project progress. The MoA needs to establish a local/project level institutional arrangement responsible for the on-going monitoring of the subproject's implementation.

- **Compliance monitoring*:*** The design of the respective ESMP identifies monitoring objectives and specifies the type of monitoring indicator that will be used in the course of the subproject implementation. Specifically, the monitoring section of the respective ESMP provides: a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions. The Project Implementation Unit (PIU) of the MoA will implement diligently the measures and actions identified in the respective ESMP in accordance with the timeframes specified, and will review the performance status as part of its monitoring and reporting.
- **Cumulative impacts assessment*:*** this will assess the actual or potential cumulative impacts of subprojects with other subprojects or development initiatives on the environment, natural resources and community groups. Cumulative impacts result from a number of individual small-scale activities that, on their own, have minimal impacts, but over time and in combination generate a significant impact.
- **Legal agreement*:*** monitoring extent and indicators may be decided in accordance with the legal agreement between the MoA (Borrower) and the Bank. The two parties may agree on the format, content, and frequency of the reports, which can vary depending on the nature of the specific subproject and the significance of the environmental and social risks, impacts, and mitigation measures. Where the Bank has identified and agreed with the Borrower and, as relevant on corrective or preventive measures and actions, all material measures and actions will be included in the ESCP. Such measures and actions will be addressed in accordance with the timeframe set out in the ESCP or, if they are not included in the ESCP, in a reasonable timeframe, in the opinion of the Bank.
- **Baseline monitoring:** in this case, indicators selected for monitoring will be based on the project's baseline data. In particular, the findings of ESIA will provide the status and record basic parameters for environmental and social issues. Changes in these parameters will be monitored as project progresses, and adjustments made in the project, if necessary, to ensure the very minimal negative consequences.
- **Scale*:*** it needs to specify monitoring indicators with respect to the nature and extent of the environmental and social risks and impacts under monitoring. The decision and application of monitoring indicators should be proportionate to the identified environmental and social risks and impacts of the subprojects.

6.2 Monitoring methods

The level of detail and complexity of the monitoring methods will be proportionate to the project's risks and impacts, and the measures and actions identified to address such risks and impacts. All or a mix of the following methods are expected in the monitoring of the DRIVE ESMF.

- **Stakeholders' consultation:** Stakeholder engagement is an inclusive process that needs to be conducted for monitoring throughout the project lifecycle. The local level implementing entity of the MoA will undertake a process of meaningful. The monitoring method will require engaging with stakeholders including communities, groups, or individuals affected by the subproject under implementation, and with other interested parties, through information disclosure, consultation, and informed participation in a manner proportionate to the risks to and impacts on affected communities. Likewise, the Bank will have the right to participate in consultation activities to understand the concerns of the affected people, and how such concerns will be addressed by the

MoA for the enhancement of the environmental and social performance of the subprojects implementation.

- **Field visit*:*** The MoA will facilitate site visits by Bank staff or consultants acting on the Bank's behalf if that is deemed necessary to monitor the environmental and social performance of the project.
- **Review checklist*:*** using the environmental and social checklist monitoring will conduct a survey assessment with different stakeholders at the end of the project year and the inputs will used to prepare an annual review report. An indicative review checklist is given in ***Annex B3***.
- **Use of third parties:** Where appropriate and as set out in the ESCP, the MoA will engage third parties or independent experts to complement or verify its own monitoring activities. Where third parties or independent experts are responsible the MoA will collaborate with such parties to establish and monitor the implementation of the environmental and social mitigation measures of the subprojects.
- **Review and feedback:** as appropriate, the Bank will review and provide feedback on the implementing organization's monitoring reports concerning the compliance of the implementation of the ESMP with the requirements of the legal agreement, including the ESCP and ESSs. Based on the feedback, the Bank will propose the necessary corrective measures and that will be incorporated and the ESMP will be amended accordingly. A project will not be considered complete until the measures and actions set out in amended ESMP have been implemented.

6.3 Monitoring and reporting timeframe

Monitoring is an on-going process

The MoA will monitor the progress of the subproject's implementation on an on-going basis. For this purpose, it needs to establish an effective local or project based institutional arrangement besides the PIU. The input from the on-going monitoring will serve the following purposes:

- Monitoring input is decisive to tract whether the subproject implementation is going as per the plan. Otherwise, the MoA will identify the necessary corrective measures in a timely manner, amend the ESMP accordingly and exert its institutional efforts to put those corrective measures into practice for the enhancement of the subproject's implementation.
- It will set out a process that allows for adaptive management of the changes or unforeseen circumstances during the implementation of the subprojects. The process will set out how such changes or circumstances will be managed and reported and any necessary changes will be made to the ESMP.
- The MoA will notify the Bank promptly of any incident or accident relating to the project which has or is likely to have a significant adverse effect on the environment, the affected communities, the public or workers. The notification will provide sufficient detail regarding such incident or accident including any fatalities or serious injuries. The Bank then will propose the immediate corrective measures to address the reported incident or accident and to prevent any recurrence. The MoA will take serious follow-up in implementing the proposed corrective measures and that will determine whether to proceed with the implementation of the subproject with the incident or accident.
- Based on the monitoring input, the Bank may provide implementation support regarding the environmental and social performance of the subprojects including guidance to assist the MoA in developing appropriate measures consistent with the mitigation hierarchy to address environmental and social risks and impacts.

Monitoring Objectives

The objectives of the monitoring are to help track the environmental and social performance of the project, determine whether it is achieving its outcomes and meeting various environmental and social requirements, and whether additional measures need to be implemented.

Table 5 :*Environmental and Social Management Framework Monitoring Plan*

Monitoring Plan			***Allocated Budget***
Indicators	***Responsible Body***	***Frequency***	
Compliance with the ESCP	The Project Management Unit (PMU) at the Ministry of Agriculture (MoA)	The PMU prepare and submit quarterly report as set out in the ESCP to the Bank of the results of the monitoring. Such reports will provide an accurate and objective record of project implementation, including compliance with the ESCP	Budget not required, to done as part of the duties of the staffs of the PMU.
Emission flows and emission loads as per the project's Guidelines for Resource Efficiency and Pollution Prevention (GREPP) and compliance with the ESS3	(a) Depending on the nature and scale of the problem, the implementing organization will designate environmental safeguard specialist. The number of staff should be proportionate to the types and levels of environmental risks and impacts that are anticipated. (b) for anticipated substantial environmental risks and impacts the Borrower will engage independent qualified third part experts. (c) The Bank may involve as per the requirements of the legal agreement with the implementing organization including the ESCP	Monitoring frequency is determined by the nature, scale, and variability of the potential emissions and may range from continuous monitoring to daily, monthly, or annually	(a) If monitoring is to be undertaken by independent qualified third-party environmental experts or consultants, 600,000 ETB/year X 5 = 3,000,000 ETB (b) If monitoring is part of project personnel's on-going responsibilities the cost of monitoring is included under ESMF implementation budget
The performance of resource efficiency and Pollution and waste management as per the project's GREPP and compliance with the ESS3			
The performance of pesticide management as per the project's Guidelines for Pest Management Plan (GPMP) and compliance with the ESS3			
The performance of biodiversity conservation and sustainable management of living natural resources as per the proposed mitigation			

Monitoring Plan			*Allocated Budget*
Indicators	***Responsible Body***	***Frequency***	
measures in the project and compliance with the ESS6.			
The performance of labour and working conditions as set out in project's LMP and compliance with the ESS2	(a) The implementing organization is responsible for direct workers and community works it hires. Also, it will monitor the performance of third parties in relation to contractual workers and primary supply workers of the project. For this purpose, it will hire qualified social expert and EHS expertise for issues related to OHS and community Health and Safety. The number of staff should be proportionate to the types and levels of the risks and impacts that are anticipated. (b) The Bank may involve as per the requirements of the legal agreement with the implementing organization including the ESCP	Throughout the project lifecycle	Monitoring cost comes as ESMF implementation budget
The performance of community health and safety as per the mitigation measures in the project and compliance with the ESS4			
The performance of project-related land acquisition, restrictions on land use and involuntary resettlement as per the project's RF and compliance with the ESS5	(a) The Borrower will retain competent resettlement professionals to monitor the implementation of resettlement plans, design corrective actions as necessary, provide advice on compliance with the ESS5. (b)The Bank may involve as per the requirements of the legal agreement with the implementing organization including the ESCP	Monitoring report will be produced annually	500,000 ETB/year X 5 = 2,500,000 ETB
The implementation of the underserved communities' mitigation actions as per the project's Guideline for the Underserved Communities Plan (GUCP) and compliance with the ESS7	(a) The Borrower will retain competent social professionals to monitor the implementation of UCP, design corrective actions as necessary, provide advice on compliance with the ESS7. (b) the Bank may involve as per the requirements of the legal agreement with the implementing organization including the ESCP	Monitoring report will be produced annually	500,000 ETB/year X 5 = 2,500,000 ETB
The implementation of the	(a) The Borrower will designate specific personnel to be	Ongoing stakeholder feedback is useful to	

Monitoring Plan			*Allocated Budget*
Indicators	***Responsible Body***	***Frequency***	
stakeholder engagement plan as set out in project's SEP and compliance with the ESS10	responsible for the implementation and monitoring of stakeholder engagement activities. The number of staff should be proportionate to the types and levels of the risks and impacts that are anticipated (b) the Bank may involve as per the requirements of the legal agreement with the implementing organization including the ESCP	monitor risks and impacts and to assess the effectiveness of the measures designed to mitigate environmental and social risks and impacts.	Monitoring cost comes as ESMF implementation budget

Reporting Timeframe

In case there are environmental and social issues that need special follow-up, the Bank and MoA may agree on the frequency of the reports and the respective ESMP will specify the reporting timeframe accordingly. Otherwise, the implementation of the ESMF proposes the reporting timeframe as follows.

- The local or project based institutional arrangement of the MoA should produce a monthly monitoring report and submit to the PIU which will be then forward to top management of the MoA for prompt decision in case corrective measures needed.
- A copy of monthly monitoring report will be shared with the regional entity of the MoA, involving third parties or primary suppliers, project-affected communities and other interested parties.
- But, unless and otherwise a special circumstance as set out in the third point under the sub-section above, the Bank will require a quarterly monitoring report that provides a detailed information on the environmental and social performance of the subproject implementation over the three months.
- In order to comply with the Bank's policy on subproject disclosure of information, annual reports and annual reviews will be submitted to the Bank and other stakeholders stated above. The PIU is normally required to produce annual report on the subproject activities during the preceding year. Whereas annual reviews should be undertaken after the annual report has been prepared and before Bank supervision of the project. The structure of annual reports and annual reviews is described in the topic that follows.

7 PART SEVEN: ESMF INSTITUTIONAL AND IMPLEMENTATION ARRANGMENT

The environmental and social sustainability of Bank projects that involve funding multiple subprojects such as DRIVE is highly and unavoidably dependent on the capacity of the local and national authorities to carry out the associated design, planning, approval and implementation works. Thus, to ensure that capacity, it is vital that the DRIVE project establishes effective institutional structure and allocates sufficient resources for the implementation of the ESMF. Part Seven describes the existing implementation arrangement and institutional capacity issues.

7.1 ESMF Institutional Arrangement

Four E&S risk management specialists (1 coordinator, 1 environmental safeguards specialist, 1 social safeguards specialist, and 1 gender specialist) are required at the federal level comprising the Project Implementation of the leading implementing agency the MoA. To effectively implement the ESMF, it proposes the hiring of 24 project personnel comprising Environmental and Social Safeguards and Gender Specialists that base the project office at the respective target regions but coordinate and oversee the implementation of the ESMF across the project areas in their respective region.

In Ethiopia the MoA will be responsible for the implementation of Component 2 of the project. For these responsibilities, the Project Implementation Unit (PIU) under the MoA will be responsible for the implementation of component 2 by working with the relevant institutions, and private sector players. The national institutional structure will have further implementation arrangements:

- Due to the multi-sectoral nature of the project, the MoA will set up a Project Steering Committee (PSC). The PSC will comprise representatives from the main government stakeholders, Ministry of Finance, Ministry of Agriculture, Ministry of Commerce, Port and Free Zones Authorities of Djibouti, and other government agencies as deemed appropriate. The PSC will be chaired by the MoA It will include the State Ministers of all the members of the PSC and other government agencies as deemed appropriate. The committee will meet on a bi-annual basis and ensure a smooth implementation and coordination based on a common action framework.
- To ensure smooth implementation and coordination, a Project Technical Committee (PTC) will be established, composed of technical representatives of the government institutions and agencies that have active engagement in the project including MoA, MoTRI, and MoF. The PTC will meet regularly (at least monthly) to review the status of the project implementation. The PIU's project coordinator will be the responsible party to regularly organize this meeting and ensure active participation.
- The implementation arrangements under the proposed project will be governed by the guidelines and procedures set out in the Project Operations Manual (POM). The POM includes operational procedures, FM, procurement methods and procedures, environment and social risk management, and M&E of the project and procedures for overall project management.

Table 6 :The roles and responsibilities of the national level implementer

Division	*Roles and responsibilities*
MoA and MoTRI	• The MoA and MoTRI are a Borrower representing the government of Ethiopia • The MoA and MoTRI will be responsible for the overall implementation of the DRIVE ESMF. • Establish and maintain an organizational structure with qualified staff and resources to support the overall management of the E&S risks coordinated by the PIU accountable to the MoTRI. To effectively discharge this crucial responsibility, staffing the PIU with experienced Environmental Safeguards Specialist (ESS), Social safeguards Specialist (SSS), Gender Specialist (GS), Security Risk Management Specialist (SRMS), EHS expertise and Procurement Specialists (PS). The PIU will closely work with FPSC and FPTC • Since the project is multi-sectoral in nature and involves other line Ministries (e.g., MoF, MoILD, MoWSA, and ESA), establish Federal Project Steering Committee (FPSC) comprising the Minister of the respective line Ministries as the member to oversee the implementation of the ESMP specified in this ESCP and facilitate inter-agency coordination for its effective performance. • Establish and maintain Federal Project Technical Committee (PTC) consist of the Director/Senior Expert from the relevant Directorate from the respective line Ministries (Livestock Production and Market Directorate at the MoTRI, Natural Resource Management Directorate at the MoA, International Financial Institution Cooperation Directorate at the MoF, Regional Pastoral Development Directorate at the MoILD, Women and Children Directorate at the MoWSA and Quality and Standard Directorate at the ESA) as the member. The FPTC is responsible for the regular technical review of the E&S performance of the project compliance with the ESMPs in this ESCP, address the challenges facing and take E&S issues that need high-level management support to their respective Minister for effective solution.
Project Implementation Unit (PIU)	• Responsible for the implementation of all project components by working with the relevant institutions, and private sector players. • The PIU shall serve as the secretariat of the PSC • The PIU's project coordinator will be the responsible party to regularly organize the PTC meeting and ensure active participation. • Senior Environmental and Social Safeguards specialist in the PIU which cooperate with the higher management at the MoA, respective Regional and Woreda Trade Offices, and project Environmental and Social Safeguards Specialists to coordinate the overall implementation of the ESMF
Project Steering Committee (PSC)	• Oversee the overall implementation of the project • Facilitate inter-agency coordination in project implementation • Review and approve annual project work plans and budgets.
Project Technical Committee (PTC)	• Responsible to technically review progress on the implementation of the agreed work plan. • Address any challenges, and take up to the ministry any issues that may need high-level support or intervention.

Division	*Roles and responsibilities*
Regional Level Implementing Arrangement	• Establish and maintain Regional Project Steering Committee (RPSC) consists of the Heads of the line Regional Bureaus of the above identified relevant Ministries as the member to oversee the implementation of the ESMP in the respective region and facilitate inter-bureau coordination for effective implementation. • Establish and maintain Regional Project Technical Committee (RPTC) comprising the relevant Departments in the line Regional Bureaus as the member. RPTC is responsible for the regular follow-up and technical review of the E&S performance of the project in the respective region compliance with the ESMPs in this ESCP, address the challenges facing and take E&S issues that need high-level management support to their respective Regional Bureaus for prompt decision or solution. The RPTC and RPSC will closely work with the PIU and CAPP.
Woreda Level Implementing Arrangement	Establish and maintain Woreda Project Task Force (WPTF) comprising the Heads and Experts from the relevant line Woreda Offices as the member. The WPTF will closely work with Focal Area Project Personnel (FAPP) to oversee the day-to-day E&S performance of the project as compliance with the ESMPs specified in this ESCP.
Cluster Area Project Personnel	To effectively implement the ESMF, it proposes the hiring of 24 project personnel comprising Environmental and Social Safeguards and Gender Specialists that base the project office at the respective target regions but coordinate and oversee the implementation of the ESMF across the project areas in their respective region.
Local Community	Active participation in subproject preparation, approval and implementation.
Consultant Group or Firm (CGF)	Since the current existing institutional structure at the MoTRI lacks the capacity to undertake the ESIA of the project and design the required ESMPs, these tasks will be contracted to competent CGF. For sub-projects involving complex and highly technical E&S risks and adverse impacts, competent independent third parties will be hired for monitoring the performance of the project.

7.2 Stakeholder consultation and participation

The DRIVE ESMF essentially involves a Multi-Stakeholder Engagement Processes (MSEPs), that is, the need for developing a mechanism for structured processes to allow the participation of various concerned bodies. This recognizes the importance of open and transparent engagement between the project implementing organization and project stakeholders as an essential element of good international practice. This requires that the project will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a time frame that enables meaningful consultations with stakeholders on project design, implementation and monitoring. The nature, scope, and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts. Please, refer to the project SEP for the details of stakeholder identification and analysis and strategies of stakeholder engagement.

7.3 Capacity Building, Training and Technical Assistances

This section describes institutional capacity assessment, capacity building, training and technical assistance included in the project to ensure effective implementation of the ESMF. These efforts will not

only benefit the DRIVE project but will also build local capacity to undertake other development initiatives funded locally or by other donors.

Institutional capacity assessment

Institutional capacity assessment focuses on the adequacy of the existing institutional arrangements (regional and national (federal to local level)), national environmental and social policies and qualified manpower to carry out their ESMF responsibilities of the DRIVE project.

Implementation arrangement gaps at the national level

The technical design of the DRIVE project involves a large-scale and complex implementation arrangement. The ESMF assessed weak implementing capacity of the PIU in the MoA that needs to be strengthened through capacity building trainings.

Implementation arrangement gaps at the respective target regions

Currently, MoA has no project implementation arrangement at the respective regional level. Hence, hiring the Environmental Expert, Social Risk Management Expert, and Gender Expert is required. Then, the project implementing staffs at the regional level requires capacity building trainings.

Implementation arrangement at project level

The ESMF proposes the hiring of full-time project personnel (Environmental Safeguards specialist, Social Safeguards Specialists, and Gender Specialists). To effectively implement the ESMF, it proposes the hiring of 24 project personnel: (a) 2 Senior Environmental and Social Safeguards specialist in the PIU which cooperate with the higher management at the MoA, line ministries,, respective Regional and Woreda Trade Offices, and local area project Environmental and Social Safeguards Specialists to coordinate the overall implementation of the ESMF; (b) Environmental and Social Safeguards and Gender Specialists that base the project office at the respective target regions but coordinate and oversee the implementation of the ESMF across the project areas in their respective region.

Technical capacity gaps

On top of the existing structural challenges, the institutional capacity assessment at all levels of implementing arrangement (federal to local project staff), envisages the technical knowledge gaps on the side of the managements and project personnel regarding relevant national and WB's environmental and social policies, implementation and monitoring of the ESMF, GBV awareness and implementation of action plan and preparation, approval and implementation of sub-projects. Therefore, the ESMF includes components in the project to strengthen the existing institutional and technical capacity to carry out key environmental and social assessment functions.

Other gaps

As reviewed in Part Two, there are gaps in the existing national laws, polices and regulations for environmental and social management, number and required qualification of the manpower from federal to local level of implementing arrangement, experience relevant to carrying out environmental analyses for multiple-subprojects, and logistics and budgetary resourced required to effectively implement the ESMF.

Trainings and technical assistances

Trainings

This subsection describes the training needs and plan for the various participants involved in implementing the ESMF based, in part, on the institutional assessment described above. The objectives of the training under the ESMF are:

- To support representatives and leaders of community groups and associations to prioritize their needs, and to identify, prepare, implement and manage the environmental and social aspects of the subprojects.
- To ensure that project area-based staffs of the MoA have the capacity to assist communities in preparing their subproject proposals, and to appraise, approve and supervise the implementation of subprojects.
- To provide technical support (including basic PMP, RF, and UCP) to communities in preparing their subprojects.
- *Awareness-raising* for participants who need to appreciate the significance or relevance of environmental and social issues.
- *Sensitization to the issues* for participants who need to be familiar enough with the issues that they can make informed and specific requests for technical assistance.
- *Detailed technical training* for participants who will need to analyze, potential adverse environmental and social impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of management plans. These trainings will address such matters as policies and legal framework on environmental and social issues, community participation methods; environmental analysis; using the ESMF checklist; preparing EMPs, RAPs, PMPs, UCPs, etc.; ESMF reporting; and subproject supervision and monitoring.

Table 7 :*Proposed Capacity Building Trainings*

For Whom	***Training Topics***	***When***	***Responsible Body***
Major ESMF implementing actors/ arrangements (PIU, FAPP, WPTF, RPTC, RPSC, FPTC and FPSC).	**ESMF requirements and implementation:** • The World Bank's ESF in general; • Assessment and Management of Environmental and Social Risks and Impact • The requirements and implementation procedures of the specific ESMPs included in this ESMF (Labour Management Procedures (LMP), Guidelines for Resource Efficiency and Pollution Prevention (GREPP), Resettlement Plan (RP), Underserved Community Plan (UCP), Stakeholder Engagement Plan (SEP)), Sexual Exploitation, Abuse and Harassment (SEAH) Prevention and Response Plan, Security Management Plan (SMP)) • Gender Based Violence (GBV); • Grievance Management; and • ESMF monitoring and reporting	Prior to disbursement for activities under component 2. Training will be carried out throughout the Project as required.	The Bank staff or its designated consultants
Project Workers	**Occupational Health and Safety (OHS) and Emergency Prevention, Preparedness and Response:** • Terms and conditions of employment;	Right after the requirement of the project	Construction contractors in collaboration

	• Occupational Health and Safety measures; • Community Health and Safety issues • Emergency prevention and preparedness and response arrangements to emergency situations. • The distinct socio-cultural norms, lifestyles, and traditional institution of the project-affected communities, particularly remote pastoral communities or people of voluntary isolation; • GBV/HEA/SH risks, mitigation measures, and means of presenting and handling complaints; • GBV Code of Conduct; • Grievance mechanism; and • Other issues as set out in the individual E&S instruments in this ESCP.	workers and training should be maintained as needed throughout the Project implementation.	with the PIU and the Bank.

Technical assistance

In addition to the project-funded training described above, it is expected that, in most cases, government officials, communities and extension teams will require technical assistance (TA). This may be needed in two major ways:

- **General TA** to ensure that local government authorities and extension teams receive, on a reliable basis, experienced advice and mentoring to assist them in carrying out their responsibilities. This component of the TA will also assess training effectiveness and recommend further training needs, based on information gleaned from regular interaction with the project participants.
- **Specific TA** to support local authorities, extension teams and communities in preparing and approving more challenging subprojects where specific technical knowledge is needed or in preparing thorough EMPs as proposed in the DRIVE ESMF.

7.4 ESMF Implementing Budget

ESMF implementing budget includes the following major components:

- Implementation of the proposed ESMPs
- Institutional development activities.
- The training program for communities, extension teams and local authorities to implement their ESMF responsibilities.
- Technical assistance to local authorities and extension teams
- Allowances for the preparation of subproject EMPs (the cost of implementing these plans is included in the subproject budgets).
- Annual review

Table 8 :*Proposed EMSF Implementation Budget*

Proposed ESMP/Activity	***Quantity***	***Unity Price/Year***	***No. of Years***	***Total Cost***	***Assumption***
Implementation of the project's GREPP Implementation of the project's PMP Implementation of the Project's BMP	Hiring 10 project Environmental Safeguards Specialist	120,000 ETB per year at the monthly rate of 10,000 ETB/staff	5	120,000 X 5 X 10= 6,000,000 ETB	1 staff in PIU, 4 in Somali, 3 in Afar, 1 in Oromia, and 1 in SNNPR
Implementation of the project's LMP Implementation of Community Health and Safety measures Implementation of the project's RAP Implementation of the project's UCP Implementation of the Project's SEP	Hiring 10 project Social Safeguards Specialist and EHS expertise for issues related to OHS and community Health and Safety and Security	120,000 ETB per year at the monthly rate of 10,000 ETB/staff	5	120,000 X 5 X 10= 6,000,000 ETB	1 staff in PIU, 4 in Somali, 3 in Afar, 1 in Oromia, and 1 in SNNPR
Implementation of project's GBV Action Plan	Hiring 4 project gender specialist	120,000 ETB per year at the monthly rate of 10,000 ETB/staff	5	120,000 X 5 X 4 = 240,000 ETB	1 staff per the target regions
Institutional capacity building activities. Provision of training on: relevant national and WB's environmental and social policies; implementation and monitoring of ESMF; GBV awareness raising and implementation and monitoring of GBV Action Plan; and preparation, approval and implementation of sub-projects	Organizing one training session every year for about 400 people (including managements, project personnel, local community members) with direct or supportive responsibilities in implementing the ESMF	1000 ETB/individual trainee	Organizing 5 training sessions (one every year)	1000 X 400 X 5 = 2,000,000 ETB	
Contingency					1,424,000 ETB
Grand Total					***15,664,000***

8 PART EIGHT: GRIEVANCE REDRESS MECHANISM

While implementing the DRIVE project, the MoA will respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner. For this purpose, the implementing agency will establish a grievance mechanism, process, or procedure to receive and facilitate resolution of such concerns and grievances. The project grievance mechanism should be proportionate to the potential risks and impacts of the project.

8.1 Grievance Resolution Approach

The scope, scale and type of grievance mechanism shall be proportionate to the nature and scale of the potential risks and impacts of the project.

- A grievance mechanism will be designed based on an understanding of the issues that are likely to be the subject of concerns and grievances in the project. The appropriate design and scale of the grievance mechanism will be subproject-specific.
- Grievance mechanism will be readily accessible to all project-affected parties and inclusive system, process, or procedure that receives and acts upon complaints and suggestions for improvement in a timely fashion, and facilitates resolution of concerns and grievances arising in connection with the project. The grievance mechanism of the project will provide project-affected parties with redress and helps address issues at an early stage.
- Handling of grievances will be done in a culturally appropriate manner and be discreet, objective, sensitive, and responsive to the needs and concerns of the project-affected parties. The mechanism will also allow for anonymous complaints to be raised and addressed.
- The grievance mechanism is expected to address concerns objectively and in a transparent manner. The involving process or procedure will not prevent the right of the project-affected parties to access formal judicial or administrative remedies concerning the subject of grievance being raised. Also, the grievance mechanism will allow for anonymous complaints to be raised and addressed.
- The grievance mechanism will provide specific places and ways whereby grievances would be received and the means by which they can be submitted (for example, mail, text message, e-mail, website, telephone, suggestion/complaint boxes, grievance form); specifies a person, an office, or an institution responsible for processing grievances; and establishes timelines for processing a complaint and a process for registering and monitoring grievances. Grievance mechanisms for larger or more complex subprojects may have multiple locations, means, and methods to receive, process, and monitor grievances, an adequately staffed team, and an appeals process.
- Actions taken on the grievance or suggestions should be informed and balanced. The time frame for grievance resolution depends on factors such as the urgency of the complaint; need for research, investigation, consultation, and funding; and institutional capacity.

8.2 GRM Timeframe

The project GRM will involve the following procedures and timeframe:

- Step 1: Submission of grievances either orally or in writing.
- Step 2: Recording of grievance and providing the initial response within 24 hours.

- Step 3: Investigating the grievance and communication of the response within 7 days.
- Step 4: Complainant response: either grievance closure or taking further steps if the grievance remains open. Once all possible redress has been proposed and if the complainant is still not satisfied then the project-affected parties with the compliant will be advised of their right to the formal legal recourse.

8.3 Grievance Log

The project grievance mechanism should have a log where grievances are properly registered in writing and maintained as a database. Different ways in which users can submit their grievances, which may include submissions in person, by phone, text message, mail, e-mail or via a web site. But, that needs to be properly recorded and documented.

The log will contain record of the persons responsible for an individual complaint, and records of dates for the following events:

- Date the complaint was reported;
- Date the Grievance Log was added onto the project database;
- Date information on proposed corrective action sent to complainant (if appropriate);
- The date the complaint was closed out; and
- Date response was sent to complainant.

8.4 Level of the GRM

Grievance procedures are required to ensure that PAPs can present complaints or concerns, without cost, and with the assurance of a timely and satisfactory resolution of the issue. Grievances will be actively managed and tracked to ensure that appropriate resolutions and actions are taken. A well-organized and well-functioning grievance redressing system is an essential and necessary mechanism to provide remedies to grievances presented by project-affected people early enough to avoid unnecessary project implementation delays and obstructions. To this end, the GRM composed the following institutional levels.

Kebele Grievance Redress Management Community (KGRMC)

The members of the KGRMC shall include the Kebele administration or council member, the DRIVE Focal Person at the kebele level, persons represented from the sub-component beneficiaries (participants), elected community elders, members of local youth and women groups, and a social worker from the Women and Social Affairs Office. This venue will help to resolve issues and complaints of affected person at the earliest point to make the process faster and cost-effective. If the complaint not resolved, the project affected person shall be advised to present his/her complaints to the next level of Appeal Hearing Body, that is, the Woreda/Sub-city Grievance Redress Management Committee (W/SGRMC).

Woreda/Sub-city Grievance Redress Management Committee (W/SGRMC)

The members of the W/SGRMC shall be composed of representatives of the Woreda/Sub-city Council, DRIVE Focal Person at the woreda level, elected person from beneficiaries (sub-component participants), representatives from elder groups and religious institutions, representatives from youth

and women groups, and social worker from the Woreda/Sub-city Women and Social Affairs Office. The W/SGRMC shall review the decision by the KGRMC and make decision on the cases of the complaints. In events where aggrieved party not satisfied with the resolution made by the W/SGRMC, he or she shall be referred to the next level, that is, Regional/City Grievance Redress Management Committee (R/CGRMC) for re-consideration of the resolution by the W/SGRMC.

Regional/City Grievance Redress Management Committee (R/CGRMC)

The members of the R/CGRMC shall be composed of the representative from the Region or City Council, DRIVE Focal Person at the regional level, representatives from beneficiaries, elders, traditional and religious institutions, youth and women groups and officer from the Regional/City Women and Social Affairs Office. The R/CGRMC will seriously review the decision by the W/SGRMC to resolve the received complaints and, thus, make all the possible efforts to satisfy the grieved party. But, in an event of dissatisfaction, the party with complains can have the right to resort to the court system.

Court Option

The project-specific GRM will not prevent the rights of the project-affected party with complaints. In events where the grievance is not resolved by the R/CGRMC at the Regional/City level, then the affected party shall be advised to take the cases to the regular court system. This would also assist in creating an alternative space for project-affected parties who would otherwise not be able to voice out their concerns through the established DRIVE GRM structure for fear of reprisals despite repeated assurances of protection.

The GRM for the DRIVE project is complementary to other existing formal grievance redress mechanisms within the legal and administrative structures including Police, Anti-Corruption Office, and Human Rights Commission. Project affected parties shall also be informed about the existing legal and formal mechanisms and be allowed to make use of them wherever they find it necessary. Also, the GRM of the DRIVE will use existing informal or traditional conflict resolution mechanisms where possible.

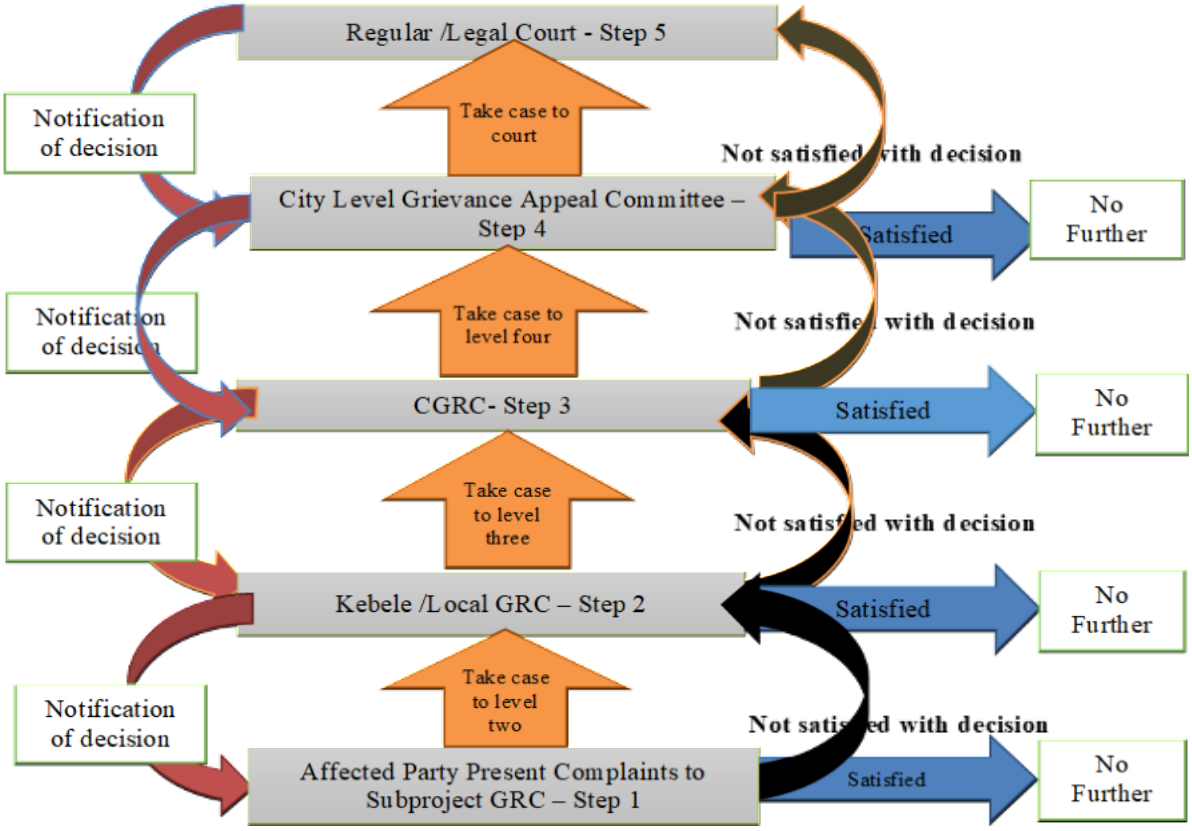

Figure 3: Flow Chart for Grievance Redress Mechanism Arrangement

Appeal Procedures

The grievance process will be simple and administered as far as possible at the local levels to facilitate access, flexibility and ensure transparency. Complaints will be received at the KGRMC in writing or orally and will be filled in a Grievance Registration Form. The steps for grievance redress are as follows:

First Step: Registration of the grievances with the Grievance Resolution Committee at the Kebele level as discussed above. The KGRMC will seek to eliminate nuisance claims and engage with legitimate claimants endeavoring to reconcile the aggrieved PAP concern or depending upon the issue to negotiate for a resolution. Where the complaint and grievance cannot be resolved by the committee, the complaint is referred to the W/SGRMC. The DRIVE GRM will provide multiple options for submission of grievances by project-affected persons in order to minimize barriers that may prevent others from forwarding their issues. These channels include the following:

a) *In person:* This may be verbal or written submissions done at any time through face to face interactions with members of committees, program officials, local administration structures.

b) *Grievance box*: Grievance boxes placed in strategic places of project implementation sites or communities where project affected parties would drop in their grievances at any time. These will also be made available at pay-points when payments being delivered.

c) *Phone Call or SMS:* This will be at project affected parties own discretion and capability. Where possible, details of relevant immediate contact persons in the project area shall be made available.

Second Step*:* The W/SGRMC receives grievance forwarded by the KGRMC concerning the aggrieved party to negotiate and forward possible resolution. The W/SGRMC having heard the concern, the meeting will respond to the aggrieved party within one week of the date of the meeting. If consensus not reached, the case will be referred to the R/CGRMC.

Third Step*:* The R/CGRMC will collect complaints from the W/SGRM. The R/CGRMC will serious review the decision by the W/SGRMC to resolve the received complaints and, thus, make all the possible efforts to satisfy the grieved party. But, in an event of the dissatisfaction, the party with complains will be referred to the next level as stated in step four below.

Final Step: The project-specific GRM will not prevent the rights of the project affected party with complaints. In events where the grievance is not resolved by the R/CGRMC, then, the grieved party has the right to resort to the regular court system.

World Bank Group Grievance Redress Service

According to World Bank Grievance Redress, communities and individuals who believe they are adversely affected by a Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns and impacts. Project affected communities and individuals may submit their complaint to the Bank's Independent Inspection Panel, which determines whether harm occurred, or could occur, because of the Bank's noncompliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's corporate GRS, see http://www.worldbank.org/GRS, and Bank's Inspection Panel, see www.inspectionpanel.org. The Bank's GRS will be shared with the project affected community as part of project information disclosure. Considering the very low literacy level of the project affected communities to access the Bank's GRS through website, the GRM provide alternative means including but not limited to posting the phone number of the Bank's GRS and Inspection Panel at the Country Office on community notice board.

ANNEX A: FRAMEWORK AND GUIDELINES

Annex 1: Environmental and Social Screening Checklist

Introduction

The need of the DRIVE project is that each subproject shall be appraised through primary environmental and social screening. The objectives of screening are to: (a) screen the social and environmental impacts and risk of a subproject; and (b) determine the type/s of mitigation measures, assessment, specific plan(s) or safeguard instrument(s) to be prepared based on the outcomes of the screening. The screening process could also be used to identify eligible or ineligible subprojects. This is done by analyzing the proposed subproject activities in relation to their environmental and social risks and impacts.

PART ONE: IDENTIFICATION

1. Name of the project: _____
2. Specific project implementation area (region and district): _____
3. Date of field appraisal: _____
4. Field appraisal officer's name and contact address: _____
5. Extension team representative's name and contact address: _____
6. Specific subproject: _____

Please, check the potential environmental and social risks and impacts of the project by ticking "X" sign in the box in front of each screening item in the table below. For "Yes" answer, assess the level of the potential impact by put the number in front of the chosen level (***Note:*** HR=High Risk, SR=Substantial Risk, MR=Moderate Risk, LR=Low Risk).

S/N	PART TWO: ENVIRONMENTAL RISKS AND IMPACTS	Check	
	The Nature of Environmental Issue	**Yes**	**No**
1.	Will this project involve or result in:		
	a. Intensive use of water with adverse impact on the need of local community		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	b. Intensive use of energy with adverse impact on the need of local community		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	c. Intensive use of raw materials with adverse impacts on the need of local community		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
2.	Potential generation of waste due to the implementation of the project;		
	a. Soil wastes		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	b. Liquid wastes		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	c. Gaseous type		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	d. Hazardous wastes		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	Potential sources of pollution in association with the undertaking of the project activities		
	a. Sources of air pollution		

3.	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	b. Sources of water pollution		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	c. Sources of soil pollution		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	d. Deforestation		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	e. Historical pollution		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	f. The project has the potential to the manufacture, trade and use of chemicals and hazardous materials		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
4.	a. Will this project involve the use of any pesticides or pesticide products or formulations?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	b. Will this project involve the use any pesticide products that contain active ingredients that are restricted under applicable international conventions or their protocols?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	c. Will this project involve the use any formulated pesticide products that meet the criteria of carcinogenicity, mutagenicity, or reproductive toxicity as set forth by relevant international agencies?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	d. Will the project have the potential to use pesticide with adverse effects on non-target species?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	e. Will the project have the potential to use pesticides with adverse human health effects?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
	f. Will the project have the potential to use pesticides the development of resistance in pests?		
	If ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
5.	a. Will the project have possible risks of traffic and road safety?		
	b. Will the project have the potential risks of community exposure to health issues?		
	c. Will the project have the possible risks of safety of services?		
	d. Will the project have the possible risks of management and safety of hazardous materials?		
	e. Possible risks due to project's security personnel?		
6.	Will this project has the potential risk to:		
	a. conversion of the natural habitats and the biodiversity they support		
	b. modify an area's primary ecological services and species composition		
	c. living natural resources		
	d. encroach nationally legally protected and/or internationally recognized areas		
	e. cause invasive alien species		
	PART THREE: SOCIAL RISKS AND IMPACTS		
	The Nature of Social Issue		
7.	a. Potential risks of violating working conditions and management of worker relationships (terms and conditions of employment, nondiscrimination and equal opportunities, and workers' organizations)?		

	b. Possible risks of child labor and minimum age involving project's employment?		
	c. Possible risks of forced labor involving project's employment?		
	d. Possible risks of Occupational Health and Safety (OHS)?		
8.	Will the project:		
	a. Require that land (public or private) be acquired (temporarily or permanently) for its development?		
	b. Use land that is currently occupied or regularly used for productive purposes (e.g. commercial places, farming, pasture, locations, forests, etc.)?		
	c. Physically displace/relocate individuals, families or businesses?		
	d. Result in temporary or permanent economic displacement (e.g. loss of business, farmland, assets. etc,)?		
	e. Restrict access to and use of communal prosperities and natural resources (e.g. social services and infrastructure, spiritual places, water resources, forests, range lands etc)?		
	f. Result in the involuntary restriction of access by people to legally designated parks and protected areas?		
	g. For any of the item a to f above, if ***"Yes"*** assess the level of the potential impact (1=HR 2=SR 3=MR 4=LR)		
8.	As defined in ESS7 paragraph (8), are there IP/UCs in and round the project areas?		
9.	If ***"Yes"*** for the question No. 5, does the project-related land acquisition will:		
	a. Have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation.		
	b. Cause relocation of IP/UCs from land and natural resources subject to traditional ownership or under customary use or occupation.		
	c. Have significant impacts on IP/UCs' cultural heritage that is material to their identity and/or cultural, ceremonial, or spiritual aspects.		
	d. Assess the level of risk and impact on IP/UCs' cultural undermining or cultural conflict due to labour influx/massive migrant workers (1=HR 2=SR 3=MR 4=LR)		
10.	Will any of the subprojects involve construction works?		
11.	If "Yes" for question No. 8, is there any construction activities that will:		
	a. Necessitate excavations, demolition, or movement of earth?		
	b. Cause change in the physical environment including pollution (air, water, soil, and biodiversity, ecosystem) and waste (liquid as well as soil) generation?		
	c. Cause change or restrict the functions of a legally protected area such parks or a legally defined buffer zone?		
	d. Operation site that is within, or in the vicinity of, a recognized cultural heritage site?		
	e. Assess the level of risks and impacts on the local cultural heritage due to the project-related construction that involves one or more of the activities listed under a to c?		

CERTEFICATION

We certify that we have thoroughly examined all the potential adverse effects of the project. To the best of our knowledge, the subproject plan as described in the ESMF will be adequate to avoid or minimize all adverse environmental and social impacts.

Name and signature of the community representative: _____

Name and signature of the extension team representative: _____

Annex 2: Terms of Reference for the Environmental and Social Impact Assessment

1. Introduction

De-Risking, Inclusion and Value Enhancement of Pastoral Economies Project (DRIVE) is part of the Horn of African Initiative through Investment Project Financing of the World Bank. The proposed project is regional, and will cover Ethiopia, Djibouti, Kenya and Somalia. With the elaboration of the chapter for Ethiopia, the GoE will undertake environmental and social impact assessment (ESIA) of the project. The GoE will conduct environmental and social assessment of the proposed project to ensure that the project activities are environmentally and socially sound and sustainable. The environmental and social assessment will be proportionate to the risks and impacts of the proposed project. The inputs from the assessment will inform the update of the project design. Also, the inputs of the assessment will be used to identify the appropriate mitigation measures and actions for the effective implementation of the project.

2. Project Background

The DRIVE project intends with the development objective to de-risk the pastoralists in the Horn of Africa including Ethiopia by: (i) protecting them against drought with enhanced financial access and risk transfer; and (ii) linking them better to markets through trade facilitation and the mobilization of private capital in the livestock value chains. The project has devised two vital components in order to achieve this development goal.

Component 1 involves De-Risk and Financing. Through the activities under this component, the project supports access to financial service to the pastoralist production group. This will involve two major interventions: first, transfer pastoralists' drought risk to the insurance market and mobilize the capital of private (re)insurance companies (local and international) on the total sum insured; and second, mobilize savings from pastoralists themselves that could be invested in other types of business, thus achieving income diversification and increasing their access to credit.

Component 2 concerns Livestock Value Chains and Trade Facilitation. This component intends to connect pastoralists better to markets through undertaking three subprojects. First, by upgrading quality infrastructure, the project would support capacity building and equipment to ensure compliance of livestock and livestock products with export standards. Second, through trade facilitation and trade logistics, the project will strengthen quarantine facilities and their efficient linkages to ports with digitization of export, improve the logistics on the transit of live animals, and improve data infrastructure to better capture livestock trade and prices. Third, by providing seed capital, the project will attract private investment in the livestock value chains.

3. World Bank Environmental and Social Framework (ESF)

The World Bank Group Development Strategy sets out the corporate goals of ending extreme poverty and promoting shared prosperity in all its partner countries. Inspired by this vision, the World Bank Group is globally committed to environmental sustainability. Its development strategies recognize that all economies still need to grow but they need to do so in an environmentally friendly manner, so that income producing opportunities are not pursued in ways that limit or close off opportunities for future generations. Equally, the World Bank's sustainable development strategies recognize, social development and inclusion are critical for all of the World Bank's financing of the development projects. For the Bank, inclusion means empowering all people to participate in, and benefit from, the development projects it finances. Inclusion encompasses measures to promote equality and

nondiscrimination in the development interventions through the Bank's Investment Project Finance. The World Bank Environmental and Social Framework which become operational since October 2018 converts these aspirations and principles of sustainable development into practical, project-level applications within the context of the Bank's mandate as set out in its Environmental and Social Standards (ESSs). As assessed in the Project Appraisal Document and Environmental and Social Management Framework (ESMF), nine out of those ten ESSs required in the Bank's Investment Project Financing are applicable to the DRIVE project with elaboration of the chapter for Ethiopia. These ESSs are:

- Assessment and Management of Environmental and Social Risks and Impacts (ESS1);
- Labor and Working Condition (ESS 2);
- Resource Efficiency and Pollution Prevention and Management (ESS 3);
- Community Health and Safety (ESS4);
- Land Acquisition, Restrictions on land use and involuntary resettlement (ESS5);
- Biodiversity Conversation and Sustainable Management of Living Natural resources (ESS 6);
- Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (ESS 7);
- Cultural Heritage (ESS 8); and
- Stakeholder Engagement and Information Disclosure (ESS10).

4. Objective and Scope of the Work

The ESIA will be conducted in accordance with the World Bank's ESS1 and will consider, in an integrated way, all relevant direct, indirect, and cumulative environmental and social risks and impacts of the per the above listed ESSs relevant for the DRIVE project. To this end, the objectives of the ESIA are:

- To identify, evaluate, and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs relevant in the project.
- To adopt a mitigation hierarchy approach in the project implementation to: (a) anticipate and avoid risks and impacts; (b) where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; (c) once risks and impacts have been minimized or reduced, mitigate; and (d) where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.
- To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.
- To utilize national environmental and social institutions, systems, laws, regulations, and procedures in the assessment, development, and implementation of the project, whenever appropriate.

5. Key Tasks

The proposed outline of the environmental and social impact assessment report is as follows::

A. Executive summary

- Concisely discusses significant findings and recommended actions.

B. Legal and institutional framework

- Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26-46

- Compares the Borrower's existing environmental and social framework and the ESSs and identifies the gaps between them.
- Identifies and assesses the environmental and social requirements of any co-financiers.

C. Project description

- Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project's primary suppliers.
- Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS1 through 10.
- Includes a map of sufficient detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts.
- Associated facilities

D. Baseline data

- Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data, as well as information about dates surrounding project identification, planning, and implementation.
- Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
- Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.
- Takes into account current and proposed development activities within the project area but not directly connected to the project.

E. Environmental and social risks and impacts

- Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESSs2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

F. Mitigation measures

- Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assess the acceptability of those residual negative impacts.
- Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
- Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the proposed mitigation measures.
- Specifies issues that do not require further attention, providing the basis for this determination.

G. Analysis of 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;

- Assesses the alternatives' feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures.
- For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

H. Design measures

- Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSGs, or if the ESHGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

I. Appendices

- List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
- References—set out the written materials, both published and unpublished, that have been used.
- Record of meetings, consultations, and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
- Tables presenting the relevant data referred to or summarized in the main text.
- List of associated reports or plans.

6. Methodology

In general, the breadth, depth, and type of analysis undertaken as part of this ESIA will depend on the nature and scale of the environmental and social risks and impacts of the project. This may require the use of different methods and tools in conducting the ESIA. In any case, the methodology should comprise desk review, quantitative survey, stakeholder consultation, and key informant interview.

7. Required Qualifications

This assignment requires experience in environmental and social assessment and knowledge of World Bank rules and procedures related to environmental and social aspects. To carry out this assignment, the firm or groups of Consultant needs to meet a minimum of the following requirements:

- Minimum of Master's Degree in development studies, natural resource management, environmental management, sociology or social anthropology or related area combined with at least five years of work experience in areas relevant to the activities of the above-mentioned tasks.
- Familiarity with analytical tools, ability to assess current situation of the local context, good understanding of local development and youth and gender issues.
- Preference will be given to previous and proven experience in preparing Environmental and Social instruments under the new World Bank Environmental and Social Framework (ESF) applied to investment project financing.
- Experience in conducting public consultations and stakeholder participation processes.
- Oral and written fluency in English.

Annex 3: Labour Management Procedures (LMP)

1. Introduction

The DRIVE ESMF the chapter for Ethiopia identified potential risks of the project with adverse impacts on labour and working conditions, community health and safety and the wellbeing (physical, mental and social) of the children. The preparation of this LMP is to facilitate planning for the labour requirement of project and set out a systematic approach to the management of labour issues in the course of implementation. More specifically, the preparation of the LMP helps to: (a) identify the different types of project workers that are likely to be involved in the project; (b) set out the ways of meeting the requirements of ESS2 and national labour laws that apply to the different types of project workers; and (c) mitigate the potential risks and impacts in resulting from the project implementation. Thereby the LMP aims to: promote safety and health at work; promote the fair treatment, nondiscrimination and equal opportunity of the project workers; protect project workers, including vulnerable workers such as women, persons with disabilities, and children as appropriate; prevent the use of all forms of forced labor and child labor; and provide project workers with accessible means to raise workplace concerns.

2. Overview of labour use on the project

The DRIVE ESMF the chapter for Ethiopia foresees massive labour requirement for the project activities both under De-Risk and Financing and Livestock Value Chains and Trade Facilitation components. This will create wide-ranging employment opportunities that may result in labour influx along the project implementation corridors. Given this circumstance, the project workers can be engaged in many different ways. Hence, in the sub-sections to follow, the DRIVE LMP identifies the different types of workers that may be engaged in the project and describe them together with the way in which the ESS2 requirements apply to each type of the project worker.

2.1 Direct workers

- Direct worker is a worker with whom the Borrower has a directly contracted employment relationship and specific control over the work, working conditions, and treatment of the project worker. The worker is employed or engaged by the Borrower, paid directly by the Borrower, and subject to the Borrower's day-to-day instruction and control. Examples of direct workers may include persons employed or engaged (e.g. PIU staff) by the Ministry of Trade and Regional Integration (MoA) to carry out the implementation, supervision and monitoring of the DRIVE project. In such a case, the DRIVE LMP applies the requirements of ESS2 paragraphs 9 to 30.
- Where government civil servants are working in connection with the project, whether full time or part time, they will remain subject to the terms and conditions of their existing public sector employment agreement or arrangement, unless there has been an effective legal transfer of their employment or engagement to the project the requirements of ESS2 will not apply to such government civil servants, except for the provisions of paragraphs 17 to 19 (Protecting the Work Force) and paragraphs 24 to 30 (Occupational Health and Safety).
- ESS2 does not seek to interfere in the relationship between the government and its civil service employees, who are normally employed under specific terms and conditions that may reflect mandatory legal requirements. While government civil servants may work on the project, for example, in the project implementation unit or project management office, their status as government civil servants is not affected.

- In the case of an effective legal transfer of employment to, or engagement of a government civil servant in the project or of a government civil servant who takes a formal unpaid leave of absence to work on the project, ESS2 applies. In these cases, for the purposes of the project, workers are no longer subject to the legal requirements relating to civil servants, and are instead employed directly by the project and subject to the provisions of ESS2 relating to direct workers referred to as in the first point.
- There may be situations in which government civil servants have no employment relationship with the project and, therefore, cannot be considered project workers. Nevertheless, they may be involved in project activities in their governmental capacity. For example, providing OHS training. The requirement of the ESS2 does not apply to such persons.

2.2 Contracted workers

- Contracted worker is a worker employed or engaged by a third party to perform work or provide services related to the core functions of the project, where the third party exercises control over the work, working conditions, and treatment of the project worker.
- 'Core functions' of the project constitute those production and/or service processes essential for a specific project activity without which the project cannot continue (e.g. livestock insurance provision and transportation logistics). Hence, third parties include entities such insurance service and transpiration logistics providers. The implementation of DRIVE anticipates a range of third parties involvement in meeting the labour needs for the project.
- In such circumstances, the DRIVE LMP applies the requirements under ESS2 paragraphs 9 to 33 as specified in Section E.

2.3 Primary supply workers

A *primary supply worker* is a worker employed or engaged by a primary supplier, providing goods and materials to the project, over whom a primary supplier exercises control for the work, working conditions, and treatment of the person. The implementation of the DRIVE expects there is a requirement that the goods or materials be provided directly to the project for its core functions on an ongoing basis. This means that second, third and further levels of the supply chain may exist in the labour requirement for the project. In this case, the DRIVE LMP applies the requirements of ESS2 paragraphs 39 to 42 of ESS2 as specified in Section G.

2.4 Community workers

The implementation of the DRIVE project may include the use of community workers in a number of different circumstances. For example: as part of implementing the resettlement plan (due to physical displacement that may result from the activities of subcomponent 2.1, subcomponent 2.2 and subcomponent 2.3), the project may require the labour contribution of the displaced community members in the construction of basic infrastructure and social services. Or, as the activities of subcomponent 2.1, the project may seek the labour contribution of the local communities in constructing animal health center in return for their access to service of such facility. In such the cases, given the nature and objectives of such engagement of the project for community workers, the application of all requirements of ESS2 may not be appropriate. Instead, the DRIVE LMP applies only those requirements of ESS2 paragraphs 34 to 38 of ESS2 as specified in Section F.

3. Assessment of key potential labour risks

- ***Gaps in national labour laws and regulations:*** The review of the exiting national labour laws showed gaps in providing the labour management procedures specifically apply to the employment opportunities created by the DRIVE project and the different categories of project workers (direct workers, contracted workers, primary supply workers and community workers). This may seriously jeopardize the working conditions and management of project worker relationships as set out in ESS2.
- **Child labour:** The availability of large number of off-school children coupled with the income problem of the pastoral households in the project areas may cause risks of children labour. Given this pushing factor, irresponsible private investors may seek to make the advantage of hiring cheap child labour.
- **Minimum age:** A child over the minimum age and under the age of 18 may be employed or engaged in connection with the project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.
- **Labour influx*:*** Possible risks of labour influx/massive migrant workers into the project implementing areas due the substantial number of employment opportunities generated from both the activities of Component 1 and Component 2 of the project.
- **Human trafficking*:*** Anticipated high risk of human trafficking as most parts of the project areas are located along the borders connecting Ethiopia to the neighboring counties in all directions except in northwest and the borders are the major international migration routines as well. Also, the labour influx and inter-country transportation facilities associated with the implementation of the DRIVE project may facilitate higher risk of human trafficking. Women and children will be more vulnerability to the problem.
- **Occupational Health and Safety:** Given the nature of the DRIVE project activities described in the ESMF, hazards may arise from materials (for example, chemical, physical, and biological substances and agents in upgrading quality infrastructure or livestock processing activities), environmental or working conditions (for example, working at heights or in confined spaces, excessive hours of work, night work, oxygen-deficient environments, excessive temperatures, improper ventilation, poor lighting, faulty electrical systems or trenches), or work processes (for example, tools, machinery, and equipment).

4. Overview of labour legislation: Terms and conditions

The Government of Ethiopia (GoE) has been issued several labour proclamation that aim to: (a) promote sound worker-management relationships; (b) enhance fair treatment, nondiscrimination and equal opportunity of the project workers; (c) providing safe and healthy working conditions to the project workers; (d) protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate; (e) prevent the use of all forms of forced labor and child labor; (f) support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; and providing project workers with accessible means to raise workplace concerns. To this end, Ethiopian Labour Laws include:

- Labor Proclamation No. 42/1993 (replaced by Labor Proclamation No. 377/2003)
- Labor Proclamation No. 377/2003
- Federal Civil Servants Proclamation 1064/2017

- Labor Proclamation No.1156/2019 (complements Labor Proclamation No. 377/2003).
- Proclamation No. 632/2009, Employment Exchange Service Proclamation
- Proclamation No. 568/2008 Rights to employment for Persons with Disabilities

The aforementioned Ethiopian Labour Laws shall be applicable to employment relations based on a contract of employment that exist between a worker and an employer including recruitment process. *A contract of employment* shall be deemed formed where a natural person agrees directly or indirectly to perform work for and under the authority of an employer for a definite or indefinite period or piece of work in consideration for wage. In accordance with this employment relation, Ethiopian Labour Laws recognize that:

- It is essential to ensure worker-employer relations are governed by basic principles of rights and obligations with a view to enabling workers and employers to secure durable industrial peace; sustainable productivity and competitiveness through cooperative engagement towards the all-round development of our country.
- It is necessary to lay down a working system that guarantees the rights of workers and employers to freely establish their respective associations and to engage, through their duly authorized representatives, in social dialogue and collective bargaining, as well as to draw up procedures for the expeditious settlement of labour disputes, which arise between them.
- There is a need to create favorable environment for investment and achievement of national economic goals without scarifying fundamental workplace rights by laying down well considered labour administration; and determine the duties and responsibilities of governmental organs entrusted with the power to monitor labour conditions; occupational health and safety; and environmental protection together with bilateral and tripartite social dialogue mechanisms; political, economic and social policies of the Country.
- The prohibition of discrimination any distinction, exclusion or preference made on the basis of nation, race, color, sex, religion, political opinion, national extraction, social origin, HIV/AIDS status, disablement and others which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation.
- It is necessary to reformulate the existing labour law with a view to attaining the aforementioned objectives and in accordance with and in conformity with the international conventions and other legal commitments to which Ethiopia is a party.
- The negative perception of persons with disability in society is deep rooted that, it has adversely affected the right of persons with disability to employment. For this reason, it has become necessary to enact a new law that complies with the countries policy of equal employment opportunity, provides reasonable accommodation (or people with disabilities to employment and lays down simple procedural rule that enable them to prove before any judicial organ discriminations encountered in employment.
- It is necessary to strengthen and define by law the powers and duties the organ charged with the responsibility of inspecting, in accordance with the law, labour administration, particularly labour conditions, occupation safety, health and work environment.
- It is necessary to revise the existing labour law providing for the basic principles which govern worker-employer relations and for labour conditions taking into account the political, economic and social policies of the government and in conformity with the international conventions and other legal commitments to which Ethiopia is a part with a view to translating into practice the objectives referred to above.

Besides, Ethiopia has ratified many of the International Labour Organization (ILO) and United Nations (UN) Conventions and incorporated into the national labour law including the following ones:

- Forced Labor Convention No. 29/1930;
- Freedom of Association and Protection of the Right to Organize Convention, No. 87/1948;
- Employment Service Convention, No. 88/1948;
- Right to Organize and Collective Bargaining Convention, No. 98/1949;
- Abolition of Forced Labor Convention, No.105/1957;
- Minimum Age Convention No. 138/1973;
- Occupational Safety and Health Convention, No. 156/1981;
- Termination of Employment Convention, No. 158/1982;
- The Rights of the Child Convention, 1989; and
- The Worst Forms of Child Labor Convention No. 182/1999.

For direct workers, the Ethiopian labour law and legislation requirements conform to guidance provided in WB ESS2. However, the Ethiopian labour law and legislation revealed numerous gaps regarding contracted workers, community workers and primary supply workers as specifically referred to the labour need of DRIVE project.

Table 1: Gaps in Ethiopian Labour Law as compared to WB ESS2 requirements for DRIVE project

Key Element	***Gaps in Ethiopian Labour Law***	***Planned Action***
Requirements of contracted workers	Not covered most of the requirements for project contracted workers set out in ESS2 paragraphs 9 to 33 as specified in Section E.	DRIVE LMP includes the requirements for project contracted workers
Requirements of community workers	Not covered most of the requirements for project community workers set out in ESS2 paragraphs 34 to 38 as specified in Section F.	DRIVE LMP includes the requirements for project community workers
Requirements of primary supply workers	Not covered most of the requirements for project primary supply workers set out in ESS2 paragraphs 39 to 42 as specified in Section G.	DRIVE LMP includes the requirements for project primary supply workers

5. Overview of Ethiopian labour legislation: Occupational Health and Safety (OHS)

The Constitution of the Federal Democratic Republic of Ethiopia (*Article 92*) clearly spells out the fundamental obligations of an employer with regard to putting in place of all the necessary measures in order to ensure, workplaces are safe, healthy and free of any danger to the wellbeing of workers. Article 42/2 stated the Rights of Labor as "workers right for healthy and safe work environment." In line with this general legislative framework, the GoE has provided numerous proclamation and Ministry of Labour and Social Affairs (MoLSA) Directives concerning OHS:

- Health Policy Statement (1993).
- Proclamation No. 4/1995
- Labour Proclamation 377/2003
- National Occupational Health Policy and Strategy, Occupational Health and Safety Directive (2008)
- Occupational Health and Safety Policy and Procedures Manual, and On Work Occupational Health and Safety Control manual for Inspectors (2017/18)

- Types of works that are dangerous to health and reproductive systems of women workers (1996/97)
- Lists of activities prohibited for young workers (14 - 18) (1996/97)
- Safety and health committees' establishment (2005)

Besides, the GoE has ratified the ILO conventions on occupational health and safety including the 8 core conventions:

- Elimination of forced labour 29/1930 and 105/1957
- Freedom of Association and Right to Collective Bargaining 87/1948 and 98/1949
- Abolition of Child Labour 138/1973 and 182/1999
- Elimination of Discrimination in employment 100/1951 and 111/1958
- Occupational Safety & Health 155/1981
- Occupational Safety and Health Directive 2008

The aforesaid proclamations, regulations and directives are meant to impose obligations on both the employer and worker to address issues of OHS. Accordingly, an employer shall take the necessary measure to safeguard adequately the health and safety of workers; it shall in particular:

- Comply with the occupational health and safety requirements provided for in the above listed OHS related proclamations, regulations and directives.
- Take appropriate steps to ensure that workers are properly instructed and notified concerning the hazards of their respective occupations; and assign safety officer; and establish an occupational health and safety committee.
- Provide workers with protective equipment, clothing and other materials and instruct them of their use.
- Register employment accidents and occupational diseases and report same to the labour inspection service.
- Arrange, according to the nature of the work, at his own expense for the medical examination of newly employed workers and for those workers engaged in hazardous work, as may be necessary with the exception of HIV/AIDS Unless and otherwise the country has obligation of international treaty to do so.
- Ensure that the workplace and premises of the undertaking do not pose threats to the health and safety of workers.
- Take appropriate precautions to ensure that all the processes of work in the undertaking shall not be a source or cause of physical, chemical, biological, ergonomic and psychological hazards to the health and safety of the workers.
- Implement the instructions given by the Competent Authority.
- Ministry of Labour and Social Affairs (MoLSA) and its regional counterparts are responsible for the enforcement and inspection of OHS.
- Likewise, any worker shall:
- Co-operate in the formulation of work rules to safeguard the workers' health and safety, and implement same.
- Inform forthwith to the employer any defect related to the appliances used and incidents of injury to health and safety of workers that he is aware of in the undertaking.
- Report to the employer any situation which he may have reason to believe could present a hazard and which he cannot prevent on his own, and any incident of injury to health which arises in the course of or in connection with work.

- Make proper use of all safety devices and other appliances furnished for the protection of his health and safety or for the protection of the health and safety of others.
- Observe all health and safety instructions issued by the employer or by the Competent Authority.

Overall, regarding direct workers in DRIVE project, the Ethiopian OHS legislation and regulations are consistent with the WB OHS as provided in ESS2 paragraphs 24 to 30 designed and implemented to address: (a) identification of potential hazards to project workers, particularly those that may be life threatening; (b) provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (c) training of project workers and maintenance of training records; (d) documentation and reporting of occupational accidents, diseases and incidents; (e) emergency prevention and preparedness and response arrangements to emergency situations; and (f) remedies for adverse impacts such as occupational injuries, deaths, disability and disease.

However, the Ethiopian OHS legislations and regulations lack clear provisions with regarding contracted workers, community workers and primary supply workers as they may specifically referred in DRIVE project. To fill the gap, this DRIVE LMP provides that the same OHS measures identified earlier for direct workers apply for project contracted workers, community workers and primary supply workers. Accordingly, all parties who employ or engage contracted workers, community workers and project workers will develop and implement procedures to establish and maintain a safe working environment, including that workplaces, machinery, equipment and processes under their control are safe and without risk to health, including by use of appropriate measures relating to chemical, physical and biological substances and agents. Also, such parties will actively collaborate and consult with project contracted workers, community workers, and primary supply workers in promoting understanding and methods for implementation of OHS requirements as well as in providing information to project workers, training on occupational safety and health, and provision of personal protective equipment without expense to the project workers.

6. Responsible staff

- Different parties are expected to involve in the implementation of the DRIVE project including: (a) project implementing organizations; (b) third parties (livestock insurance service providers, private investors in livestock production and product processing, quality infrastructure upgrading contractor, transport logistic providers; and (c) primary suppliers providing goods and materials to the project. All these entities will be responsible for the implementation of the DRIVE LMP depending on the category of project workers over which they exercise control for the work and working conditions. But, the project implementing organization (MoA) has double responsibilities for the reason stated next.
- For direct workers and community workers: the responsibility of implementing the LMP exclusively rests on the implementing organization the MoA and its line office at the regional, zonal and woreda levels.
- For contracted workers: the respective third parties will be responsible to strictly apply the requirements of labour and working conditions as set out for contracted workers in the DRIVE LMP.

- For primary supply workers: the respective primary supply organization will be responsible to strictly apply the requirements of labour and working conditions as set out for primary supply workers in the DRIVE LMP.
- Double responsibility of the MoA: Besides implementing the LMP concerning direct workers and community workers, the MoA and its line office at the regional, zonal and woreda levels will be responsible for the implementation of the LMP relating to contracted workers and primary supplier workers. This will happen in two ways. First, the MoA and its line office at the regional, zonal and woreda levels are in charge of ensuring that the third parties and primary suppliers develop the means of labour management for their respective category of workers as required in the labour and working conditions specified in this DRIVE LMP. Second, the project implementing organization will establish procedures for managing and monitoring the performance of third parties and primary suppliers in relation to the requirements of DRIVE LMP.

7. Policies and procedures

This section outlines the main policies and procedures to be followed during the implementation of the DRIVE project and will be updated and amended as needed, after contracts have been awarded.

7.1 Project's environmental and social management

- In an effort to mitigate the environmental and social impact relating to the DRIVE project, it is the intention that mitigation measures will be put in place by incorporating standardized clauses in the tender documentation and contract documents with the third parties and primary suppliers involving in the DRIVE project. So that the involving entities will be aware of the environmental and social obligations under the project before undertaking the activities for which they are assigned for.
- Most environmental and social impacts of subprojects resulting from activities directly under the control of third parties and primary suppliers will be mitigated directly by the same entities. As a consequence, ensuring that contractors effectively mitigate project activities related impacts is the core of the DRIVE project's approach.
- As mandatory part of the contractual requirement, all third parties and primary suppliers need to ensure all documentation related to environmental and social management, including the LMP, is available for inspection at any time by the MoA or its appointed agents. The contractual arrangements with each project worker must be clearly defined in accordance with Ethiopian Labour Law. A full set of contractual requirements related to environmental and social risk and impact management will be provided in the Projects' Environmental and Social Impact Assessment. All environmental and social requirements will be included in the bidding documents and contracts in addition to any additional clauses, which are contained, in the project's environmental and social instruments.
- Under no circumstances will MoA, third parties, primary suppliers or their contractors or sub-contractors involving in the DRIVE project engage in forced labor including bonded labor (working against an impossible debt), excessive limitations of freedom of movement, excessive notice periods, retaining the worker's identity or other government-issued documents or personal belonging, imposition of recruitment or employment fees payable at the commencement of employment, loss or delay of wages that impede the workers' right to end employment within their legal rights, substantial or inappropriate fines, physical punishment,

use of security or other personnel to force or extract work from project workers, or other restrictions that compel a project worker to work in a non-voluntary basis.

7.2 Project's Occupational Health and Safety (OHS)

The DRIVE project OHS measures will comply to: (a) the national occupation health and safety proclamations and regulations highlighted in Section five of this LMP; (b) the WB Environmental, Health and Safety (EHS) Guidelines; and (c) as appropriate, the industry-specific EHSGs and other Good International Industry Practice (GIIP).

The implementation of the DRIVE project will be based on the OHS first principle. It avoids or eliminates sources of hazards to project workers health and safety rather than simply addressing the hazard through protective measures such as personal protective equipment. However, when it is not feasible to avoid or eliminate the hazard, appropriate protective measures are included in the project's OHS measures, such as controlling the hazard at its source through the use of protective solutions (for example, exhaust ventilation systems, isolation rooms, machine guarding, acoustic insulation), and providing adequate personal protective equipment at no cost to the project worker. The project should provide adequate first aid facilities and relevant training. Protective measures would include hazard labeling in languages understandable to the project workers, and training and equipment to prevent occupational exposure to hazardous materials.

The way in which the OHS provisions apply in the DRIVE depends on the type of project activities; the nature and severity of the hazards, risks, and impacts; and the types of workers involved. Accordingly, appropriate OHS measures are incorporated into the design and implementation of the project to prevent and protect workers from occupational injuries, illness, or impacts associated with exposure to hazards encountered in the workplace or while working.

The OHS measures applying to the DRIVE project will be set out in the legal agreement between: (a) WB and MoA on behalf of the GoE; and (b) MoA and third parties and primary supplier involving in the project. Accordingly, the parties will:

- Complying with legislation and other applicable requirements which relate to the company's occupational health and safety hazards.
- Enabling active participation in OHS risks elimination through promotion of appropriate skills, knowledge and attitudes towards hazards.
- Continually improving the OHS management system and performance.
- Communicating this policy statement to all persons working in the project with emphasis on individual OHS responsibilities.
- Availing this policy statement to all interested parties at all MoA facilities and sites.

Project workers at all levels have the authority to stop any activity they consider to be a danger to themselves or other workers, the public or the environment. The project is committed to non-retaliation to stop-work actions by project workers.

The ESS will develop sub-policies, guidelines, procedures, instructions and training and awareness materials to support this policy.

7.3 Project's management of Labour influx and gender-based violence

Third parties, primary suppliers or their constructors or sub-contractors will need to maintain labor relations with local communities through a code of conduct (CoC). The CoC commits all persons engaged by these entities to acceptable standards of behavior. The CoC must include sanctions for non-compliance, including non-compliance with specific policies related to gender-based violence, sexual exploitation and sexual harassment (e.g., termination). The CoC should be written in plain language and signed by each worker to indicate that they have:

- received a copy of the CoC as part of their contract;
- had the CoC explained to them as part of induction process;
- acknowledged that adherence to this CoC is a mandatory condition of employment;
- understood that violations of the CoC can result in serious consequences, up to and including dismissal, or referral to legal authorities;

A copy of the CoC shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in English and the language of the project-affected communities.
Likewise, all project involving employers (MoA, third parties, primary suppliers or their constructors or sub-contractors) must address the risk of gender-based violence through:

- Mandatory training and awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women. Training may be repeated;
- Informing workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted;
- Adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence;
- Developing a system to capture gender-based violence, sexual exploitation and workplace sexual harassment related complaints/issues.
- This process will be under the portfolio of the Social Standards Officer who shall identify and engage the relevant stakeholders on GBV issues.

8. Child labour and minimum age

- A child under the age of 5 will not be employed or engaged in connection with any DRIVE project activity.
- The Ethiopian Labour Proclamation No. 1156/2019 (Article 89 (a)) specifies the minimum age means "a young worker who has attained the age of 15 but is below the age of 18 years." Given this minimum age, a young worker may be employed or engaged in connection with the project only under the following specific conditions: (a) the work does not fall within ESS2 paragraph 19; (b) an appropriate risk assessment is conducted prior to the work commencing; and (c) the Borrower conducts regular monitoring of health, working conditions, hours of work, and the other requirements of the ESS2.
- A young worker will not be employed or engaged in connection with the project in a manner that is likely to be hazardous, interfere with the child's education, or be harmful to the child's health or physical, mental, spiritual, moral, or social development.

9. Terms and conditions

Project workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment. The information and documentation will set out their rights under national labor and employment law (which will include any applicable collective agreements), including their rights related to hours of work, wages, overtime, compensation, and benefits, as well as those arising from the requirements of ESS2. This information and documentation will be provided at the beginning of the working relationship, and when any material changes, to the terms or conditions of employment occur.

Documentation should be appropriate and relevant to the length and nature of the employment or engagement, accessible to inform the project workers concerned, and provided in a language understood by the workers.

Project workers will be paid on a regular basis as required by national law and labor management procedures. Deductions from payment of wages will only be made as allowed by national law or the labor management procedures, and project workers will be informed of the conditions under which such deductions will be made. Project workers will be provided with adequate periods of rest per week, annual holiday and sick, maternity and family leave, as required by national law and labor management procedures.

Documents and contracts include information on the following, as appropriate:

- The name and legal domicile of the employer;
- The worker's name;
- The worker's job title;
- The date employment began;
- Where the employment is not permanent, the anticipated duration of the contract;
- The place of work, or where the work is mobile, the main location;
- Housing and accommodation provisions and payment required, if any;
- Provisions regarding food and payment required, if any;
- Hours of work, rest breaks, leave entitlements, and other related matters;
- Rules relating to overtime and overtime compensation;
- The levels and rules relating to the calculation of salary, wages, and other benefits, including any rules related to timing of payment and deductions;
- The pension and other welfare arrangements applicable to the worker;
- The length of notice that the worker can expect to give and receive on termination of employment;
- The disciplinary procedures that are applicable to the worker, including details of representation available to the worker and any appeals mechanism;
- Details of grievance procedures, including the person to whom grievances should be addressed; and
- Any collective bargaining arrangements that apply to the worker.

Project workers will receive written notice of termination of employment and details of severance payments in a timely manner. All wages that have been earned, social security benefits, pension contributions, and any other entitlements will be paid on or before termination of the working relationship, either directly to the project workers or where appropriate, for the benefit of the project

workers. Where payments are made for the benefit of project workers, project workers will be provided with evidence of such payments.

Nondiscrimination and equal opportunity:

- Decisions relating to the employment or treatment of project workers will not be made on the basis of personal characteristics unrelated to inherent job requirements. 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, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, or disciplinary practices.
- Discrimination in employment as it relates to project workers is any distinction, exclusion, or preference with respect to recruitment, hiring, termination of employment, working conditions, or terms of employment made on the basis of personal characteristics unrelated to inherent work requirements, which nullify or impair equality of opportunity or treatment in employment. Inherent work requirements refer to genuine occupational qualifications that are necessary to perform the work.
- Equal opportunity is the principle of basing all employment decisions, such as hiring and promotion, on the ability of a person to perform the work, without regard to personal characteristics that are unrelated to the inherent work requirements.
- However, special measures of protection and assistance to remedy discrimination or selection for a particular job based on the inherent requirements of the job or the objectives of the project will not be deemed as discrimination, provided they are consistent with national law.
-
- Persons with disability:
- Measures that address working conditions, accessibility of the built environment, and communication of information for project workers with disabilities include, for example, the provision of wheelchair ramps or elevators, or alternative formats of communication, such as large print, Braille, accessible digital formats, or audio tape.
- Further specific project measures will be included depending on the nature of disability and the need of the worker in consideration.
-
- Workers' organization:
- In accordance with the Ethiopian Labour Law Proclamation No. 1156/2009, the DRIVE LMP recognizes project workers' freedom of association and/or collective bargaining. Project workers under all categories identified in this LMP have the rights to form and to join workers' organizations of their choosing, project workers are not discouraged from, or discriminated or retaliated against, for forming or joining (or attempting to form or join) such organizations.
- For the purpose of the DRIVE LMP, a workers' organization is any organization of workers for the purpose of furthering and defending their interests, in particular with regard to working conditions and terms of employment. They are formed and organized by workers, and should operate without outside control or interference. Workers' organizations should be

representative of the workforce and operate pursuant to the principles of fair and reasonable representation of workers and their interests in the context of the project.

- Collective bargaining consists of discussions and negotiations among employers, employers' organizations, and workers' organizations for the purpose of determining working conditions and terms of employment by joint agreement. It also includes instructions on the implementation and administration of any agreements that may result from collective bargaining and the resolution of issues and grievances that arise in the employment relationship with respect to workers represented by the workers' organization. Collective bargaining can take place in different ways, depending on the categories of project workers.

10. Grievance Redress Mechanism (GRM)

- DRIVE requires that a grievance mechanism will be provided for all direct workers and contracted workers (and, where relevant, their organizations) to raise workplace concerns. Such workers will be informed of the grievance mechanism at the time of recruitment and the measures put in place to protect them against reprisal for its use. Measures will be put in place to make the grievance mechanism easily accessible to all such project workers.
- The provision of the DRIVE LMP is that workplace concerns are usually different from issues raised by project-affected parties and other stakeholders, and therefore call for a separate mechanism to address them. The design of a workplace grievance mechanism includes elements of a grievance mechanism as identified in ESS10 and the accompanying guidance, but will also include features specifically designed to address the DRIVE project workplace concerns.
- The DRIVE seeks an effective and appropriate grievance mechanism operates with independence and objectivity, informs workers of the steps being taken to address their concerns, and allows for feedback about the response, within the time frames specified in the grievance mechanism procedure, and an appeals process to which unsatisfied grievances may be referred. To the extent possible, the project grievance mechanism uses or supplements existing workplace grievance mechanisms. The grievance mechanism will be accessible to all direct and contracted workers, taking into account their different characteristics, for example, female workers, migrant workers, or workers with disabilities. Where appropriate, consideration can be given to allowing concerns to be raised anonymously and/or to a person other than an immediate supervisor.
- The DRIVE project grievance mechanism will be proportionate to the nature and scale and the potential risks and impacts of the project. It will be designed to address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned in a language they understand.
- The DRIVE project grievance mechanism may utilize existing grievance mechanisms, providing that they are properly designed and implemented, address concerns promptly, and are readily accessible to such project workers. Existing grievance mechanisms may be supplemented as needed with project-specific arrangements.
- The DRIVE grievance mechanism will not impede access to other judicial or administrative remedies that might be available under the law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements.

11. Contractor Management

Employment relation in DRIVE requires that all involving contractors monitor, keep records and report on terms and conditions related to labour management. The contractor must provide workers with

evidence of all payments made including social security benefits, pension contributions or other entitlements regardless of the worker being engaged on a fixed term contract, full-time, part-time or temporarily. The application of this requirement will be proportionate to the activities and to the size of the contract in a manner acceptable to the World Bank's ESS2 and the DRIVE LMP.

A. Contractor management involving workers

- Labour conditions: Records of workers engaged under the project including contracts, registry of induction of workers including CoC, hours worked, remuneration and deductions (including overtime), and collective bargaining agreements.
- Safety: Recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
- Workers: Number of workers, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labour is involved, and skill level (unskilled, skilled, supervisory, professional, management).
- Training/induction: Including dates, number of trainees and topics/issues addressing in the training.
- Details of any security risks: Details of risks the contractor may be exposed to while performing its work.
- Worker grievances: Details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken. Grievance's list should include those received since the preceding report and those that were unresolved at the time of that report.

B. Contractor management involving workers

The MoA will require that all contractors engaged on the project operate in a manner consistent with the requirements of the World Bank ESSs, including the specific requirements set out in the ESCP. The MoA will manage all contractors in an effective manner, including:

- Assessing the environmental and social risks and impacts associated with such contracts.
- Ascertaining that contractors engaged in connection with the project are legitimate and reliable enterprises, and have knowledge and skills to perform their project tasks in accordance with their contractual commitments.
- Incorporating all relevant aspects of the ESCP into tender documents.
- Contractually requiring contractors to apply the relevant aspects of the ESCP and the relevant management tools, and including appropriate and effective noncompliance remedies.
- Monitoring contractor compliance with their contractual commitments.
- In the case of subcontracting, requiring contractors to have equivalent arrangements with their subcontractors.

12. Community workers

The implementation of the DRIVE project may include the use of community workers in a number of different circumstances. For example: as part of implementing the resettlement plan (due to physical displacement that may result from the activities of subcomponent 2.1, subcomponent 2.2 and

subcomponent 2.3), the project may require the labour contribution of the displaced community members in the construction of basic infrastructure and social services. Or, as the activities of subcomponent 2.1, the project may seek the labour contribution of the local communities in constructing animal health center in return for their access to service of such facility. In such the cases, given the nature and objectives of such engagement of the project for community workers, the application of all requirements of ESS2 may not be appropriate. Instead, the DRIVE LMP applies only those requirements of ESS2 paragraphs 34 to 38 of ESS2 as specified in Section F

Accordingly, the requirements are:

- The project implementing organization the MoA and its regional, zonal and woreda level entities, third parties, primary suppliers or their contractors or sub-constructors should ensure that such labour is provided on a voluntary basis. Work is on a voluntary basis when it is done with the free and informed consent of a worker. Such consent must exist throughout the employment relationship and the worker must have the possibility to revoke freely given consent. In particular, there can be no "voluntary offer" under threat or other circumstances of restriction or deceit.
- It is good practice to document the agreement that is reached with community workers recording the terms on which such labor will be provided. This includes details of what has been agreed, the way in which such agreement was reached, and how the community workers are represented. Also, it is good practice to meet with the community and community workers to discuss and agree on the terms of their engagement with the project, prepare minutes of such meetings, and share the minutes with the community, the community workers, and their representatives.
- Issues to be taken into account in assessing how to apply ESS2 in a proportionate manner include consideration of the age, gender, and specific vulnerability of the individual or group of community workers in relation to the nature of the project's risks and impacts, and the project activities to be conducted by those workers. The health and safety risks to which the community workers may be exposed will be assessed, as well as the ability to prevent or eliminate such risks or, if the risk cannot be prevented or eliminated, the ability to protect community workers from exposure.
- While community workers can raise grievances in relation to the project, in many cases the nature of such grievances and the way in which they are addressed and resolved may differ from those of other project workers. For this reason, the project grievance mechanism should be adapted to reflect the specific characteristics of the community workers and the project.
- Where community workers are expected in the project, the project's LMP set out details relating to the terms and conditions for engaging community workers, the way in which grievances will be addressed, and any additional measures designed to mitigate specific risks and impacts relating to the community workers under the project.
- Communication with community workers, in a language and form understandable to them, is important, so that they know what to expect from the project, and understand their own responsibilities under the project. Training of community workers should be conducted on a regular basis, as appropriate to the potential risks and impacts of the project.

13. Primary supply workers

The labour need of the DRIVE anticipate goods and materials to be obtained from primary suppliers. The supply may be local in nature or come from other parts of the country or from outside the country. For this reason, the project ESIA need to:

- Given the possible goods and material needs of the DRIVE project, identify the potential child labor, forced labor, and serious safety risks or are prevalent or known to exist in a specific sector of primary supplier in connection with the supply of such goods and materials. Then, a mapping exercise should be conducted to identify possible primary suppliers and the extent to which they may present such risks.
- Where it is not possible to identify specific primary suppliers, the assessment should review general industry labor issues and risks relating to the supply of such goods and materials. It is also useful to periodically update the assessment of potential risks that may arise in relation to primary suppliers of the project during project implementation.
- Tracking of suppliers' performance helps inform whether procedures and mitigation measures are being appropriately implemented and provide feedback on performance and any new areas of risk.
- Where there is a significant risk of child labor or forced labor related to primary supply workers, the MoA will require the primary supplier to identify those risks consistent with ESS2 paragraphs 17 to 20. The labor management procedures will set out roles and responsibilities for monitoring primary suppliers. If child labor or forced labor cases are identified, the MoA will require the primary supplier to take appropriate steps to remedy them.
- Additionally, where there is a significant risk of serious safety issues related to primary supply workers, the MoA will require the relevant primary supplier to introduce procedures and mitigation measures to address such safety issues. Such procedures and mitigation measures will be reviewed periodically to ascertain their effectiveness.

Annex 4: Guidelines for Resource Efficiency and Pollution Prevention (GREPP)

1. Introduction

The ESMF expects that the DRIVE project activities generate pollution to air, water, and land, and consume huge resources that may threaten people, ecosystem services and the environment (refer to Part Four of the ESMF). The Guidelines for Resource Efficiency and Pollution Prevention (GREPP) provide the framework to address resource efficiency and pollution prevention and management throughout the project life cycle as set out in GIIP with the objectives:

- To promote the sustainable use of resources, including energy, water and raw materials.
- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short and long-lived climate pollutants.
- To avoid or minimize generation of hazardous and non-hazardous waste.
- To minimize and manage the risks and impacts associated with pesticide use.

2. General Approach to the Management of the EHS Issues in the DRIVE Project

Effective management of environmental, health, and safety (EHS) issues in the DRIVE project entails the inclusion of EHS considerations into corporate and facility-level business processes in an organized, hierarchical approach that includes the following steps:

- Identifying EHS project hazards and associated risks as early as possible in the facility development or project cycle, including the incorporation of EHS considerations into the site selection process, product design process, engineering planning process for capital requests, engineering work orders, facility modification authorizations, or layout and process change plans.
- Involving EHS professionals, who have the experience, competence, and training necessary to assess and manage EHS impacts and risks, and carry out specialized environmental management functions including the preparation of the project or activity-specific plans and procedures that incorporate the technical recommendations presented in this GREPP.
- Understanding the likelihood and magnitude of EHS risks, based on:

a) The nature of the project activities, such as whether the project will generate significant quantities of emissions or effluents, or involve hazardous materials or processes.
b) The potential consequences to workers, communities, or the environment if hazards are not adequately managed, which may depend on the proximity of project activities to people or to the environmental resources on which they depend.

- Prioritizing risk management strategies with the objective of achieving an overall reduction of risk to human health and the environment, focusing on the prevention of irreversible and/or significant impacts.
- Favoring strategies that eliminate the cause of the hazard at its source, for example, by selecting less hazardous materials or processes that avoid the need for EHS controls.
- When impact avoidance is not feasible, incorporating engineering and management controls to reduce or minimize the possibility and magnitude of undesired consequences, for example, with the application of pollution controls to reduce the levels of emitted contaminants to workers or environments.
- Preparing workers and nearby communities to respond to accidents, including providing technical and financial resources to effectively and safely control such events, and restoring workplace and community environments to a safe and healthy condition.
- Improving EHS performance through a combination of ongoing monitoring of facility performance and effective accountability.

3. Air Emissions and Ambient Air Quality

This guideline applies to DRIVE project facilities or activities that generate emissions to air at any stage of the project life cycle. The guideline provides an approach to the management of significant sources of emissions, including specific guidance for assessment and monitoring of impacts.

3.1 General Approach

The activities from subprojects in Component 2 of the DRIVE project may generate emissions of air pollutants in a variety of ways. Refer to the details on the project components (***Annex A***) and potential risks and impacts of the project (***Part Four*** of the ESMF). These activities can be categorized based on the spatial characteristic of the source including point sources, fugitive sources, and mobile sources and, further, by process, such as combustion, materials storage, or other industry sector-specific processes.

Where possible, the project activities and facilities should avoid, minimize, and control adverse impacts to human health, safety, and the environment from emissions to air. Where this is not possible, the generation and release of emissions of any type should be managed through a combination of:

- Energy use efficiency

- Process modification
- Selection of fuels or other materials, the processing of which may result in less polluting emissions
- Application of emissions control techniques
-
- The selected prevention and control techniques may include one or more methods of treatment depending on:
- Regulatory requirements
- Significance of the source
- Location of the emitting activity or facility relative to other sources
- Location of sensitive receptors
- Existing ambient air quality and potential for degradation of the airshed from the project
- Technical feasibility and cost effectiveness of the available options for prevention, control, and release of emissions

3.2 General Standards

- Emissions from the project activities or facilities do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards by applying national legislated standards, or in their absence, the current WHO Air Quality Guidelines.
- Emissions do not contribute a significant portion to the attainment of relevant ambient air quality guidelines or standards. As a general rule, the guideline in the DRIVE project suggests percent of the applicable air quality standards to allow additional, future sustainable development in the same airshed.
- At project activity or facility level, impacts should be estimated through qualitative or quantitative assessments by the use of baseline air quality assessments and atmospheric dispersion models to assess potential ground level concentrations. Local atmospheric, climatic, and air quality data should be applied when modeling dispersion, protection against atmospheric downwash, wakes, or eddy effects of the source, nearby structures, and terrain features. The dispersion model applied should be internationally recognized, or comparable.

3.3 Point Sources

- Point sources are discrete, stationary, identifiable sources of emissions that release pollutants to the atmosphere. They are typically located in the subproject site with the generation of emission. Within a given point source, there may be several individual 'emission points' that comprise the point source.
- Point sources are characterized by the release of air pollutants typically associated with the combustion of fossil fuels such as nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), and particulate matter (PM), as well as other air pollutants including certain volatile organic compounds (VOCs) and metals that may also be associated with the project activities.
- Emissions from point sources should be avoided and controlled according to WBG EHS Guidelines and other good international industry practice (GIIP) applicable to the relevant industry sector, depending on ambient conditions, through the combined application of process modifications and emissions controls.

3.4 Greenhouse Gases (GHGs)

Project activities that may have potentially significant emissions of greenhouse gases (GHGs) include large-scale or export-based livestock rearing, transportation facilities, large-scale fodder plantation, deforestation due to project-related land acquisition or land use practice, and waste generation from different activities. GHGs may be generated from direct emissions from facilities within the physical project boundary and indirect emissions associated with the off-site production of power used by the project.

Recommendations for reduction and control of greenhouse gases include:

- Promoting palatable fodder production
- Carbon financing
- Enhancement of energy efficiency
- Protection and enhancement of sinks and reservoirs of greenhouse gases
- Promotion, development and increased use of renewable forms of energy;
- Carbon capture and storage technologies
- Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy (coal, oil, and gas).

4. Energy Conservation

This guideline applies to the project activities or facilities that consume energy. These typically include livestock processing industry, quality infrastructure activities, and transportation facilities. Besides, the DRIVE project energy management should be viewed in the context of its overall consumption patterns, including those associated with production processes and supporting utilities, as well as overall impacts associated with emissions from power sources. The following sections provide guidance on energy management.

4.1 Energy Management Programs

Energy management programs should include the following elements:

- Identification and regular measurement and reporting of principal energy flows within a facility at unit process level
- Preparation of mass and energy balance
- Definition and regular review of energy performance targets, which are adjusted to account for changes in major influencing factors on energy use
- Regular comparison and monitoring of energy flows with performance targets to identify where action should be taken to reduce energy use
- Regular review of targets, which may include comparison with benchmark data, to confirm that targets are set at appropriate levels

4.2 Energy Efficiency

For any energy-using subproject of the project, a systematic analysis of energy efficiency improvements and cost reduction opportunities should include a hierarchical examination of opportunities.

Explore alternative energy sources

The DRIVE project areas have high potential for alternative sources of energy. The ESMF recommends exploring opportunities for cheap and cleaner sources of energy including the use of:

- Solar energy
- Wind energy
- Geothermal energy

Demand and supply side management

- Demand/Load Side Management by reducing loads on the energy system
- Supply Side Management by:
  a) Reduce losses in energy distribution
  b) Improve energy conversion efficiency
  c) Exploit energy purchasing opportunities
  d) Use lower-carbon fuels

Process heating

- Process heating is vital to many project activities with energy consumption.
- In process heating systems, a system heat and mass balance will show how much of the system's energy input provides true process heating, and quantify fuel used to satisfy energy losses caused by excessive parasitic loads, distribution, or conversion losses. Examination of savings opportunities should be directed by the results of the heat and mass balance.

Heating Load Reduction

Heating Load Reduction to:

- Ensure adequate insulation to reduce heat losses through furnace/oven structure
- Recover heat from hot process or exhaust streams to reduce system loads
- In intermittently heated systems, consider use of low thermal mass insulation to reduce energy required to heat the system structure to operating temperature
- Control process temperature and other parameters accurately to avoid, for example, overheating or over drying
- Examine opportunities to use low weight and/or low thermal mass product carriers, such as heated shapers, kiln cars etc.
- Review opportunities to schedule workflow to limit the need for process reheating between stages
- Operate furnaces/ovens at slight positive pressure, and maintain air seals to reduce air in-leakage into the heated system, thereby reducing the energy required to heat unnecessary air to system operating temperature
- Reduce radiant heat losses by sealing structural openings and keep viewing ports closed when not in use
- Where possible, use the system for long runs close to or at operating capacity
- Consider use of high emissivity coatings of high temperature insulation, and consequent reduction in process temperature
- Robust Quality assurance on input material
- Robust Scheduled maintenance programs

Heat Distribution Systems

Heat distribution in process heating applications typically takes place through steam, hot water, or thermal fluid systems. Losses can be reduced through the following actions:

- Promptly repair distribution system leaks

- Avoid steam leaks despite a perceived need to get steam through the turbine. Electricity purchase is usually cheaper overall, especially when the cost to treat turbine-quality boiler feed water is included. If the heat-power ratio of the distribution process is less than that of power systems, opportunities should be considered to increase the ratio; for example, by using low-pressure steam to drive absorption cooling systems rather than using electrically-driven vapor compression systems
- Regularly verify correct operation of steam traps in steam systems, and ensure that traps are not bypassed.
- Insulate distribution system vessels, such as hot wells and de-aerators, in steam systems and thermal fluid or hot water storage tanks
- Insulate all steam, condensate, hot water and thermal fluid distribution pipe work
- In steam systems, return condensate to the boiler house for re-use, since condensate is expensive boiler-quality water and valuable beyond its heat content alone
- Use flash steam recovery systems to reduce losses due to evaporation of high-pressure condensate
- Consider steam expansion through a back-pressure turbine rather than reducing valve station
- Eliminate distribution system losses by adopting point-of use heating systems

Energy Conversion System Efficiency Improvements

The following efficiency opportunities should be examined for process furnaces or ovens, and utility systems, such as boilers and fluid heaters:

- Regularly monitor CO, oxygen or CO2 content of flue gases to verify that combustion systems are using the minimum practical excess air volumes
- Consider combustion automation using oxygen-trim controls
- Minimize the number of boilers or heaters used to meet loads. It is typically more efficient to run one boiler at 90% of capacity than two at 45%.
- Minimize the number of boilers kept at hot–standby
- Use flue dampers to eliminate ventilation losses from hot boilers held at standby Maintain clean heat transfer surfaces; in steam boilers, flue gases should be no more than 2o K above steam temperature)
- In steam boiler systems, use economizers to recover heat from flue gases to pre-heat boiler feed water or combustion air
- Consider reverse osmosis or electrodialysis feed water treatment to minimize the requirement for boiler blowdown
- Adopt automatic (continuous) boiler blowdown
- Recover heat from blowdown systems through flash steam recovery or feed-water preheat
- With fired heaters, consider opportunities to recover heat to combustion air through the use of recuperative or regenerative burner systems
- Oxy Fuel burners
- Oxygen enrichment/injection
- Use of turbulators in boilers
- Sizing design and use of multiple boilers for different load configurations
- Fuel quality control/fuel blending

Energy Conversion

The efficiency of refrigeration service provision is normally discussed in terms of Coefficient of Performance ("COP"), which is the ratio of cooling duty divided by input power. COP is maximized by effective refrigeration system design and increased refrigerant compression efficiency, as well as minimization of the temperature difference through which the system works and of auxiliary loads (i.e. those in addition to compressor power demand) used to operate the refrigeration system.

5. Wastewater and Ambient Water Quality

This guideline applies to the DRIVE project activities that have either direct or indirect discharge of process wastewater, wastewater from utility operations or storm water to the environment. These guidelines are also applicable to livestock processing industrial discharges to sanitary sewers that discharge to the environment without any treatment. Process wastewater may include contaminated wastewater from utility operations, storm water, and sanitary sewage. The following guidelines provide general information on wastewater and ambient water quality.

5.1 General Approach

In the context of their overall ESHS management system, the DRIVE project facilities and activities should:

- Understand the quality, quantity, frequency and sources of liquid effluents in its installations. This includes knowledge about the locations, routes and integrity of internal drainage systems and discharge points.
- Plan and implement the segregation of liquid effluents principally along industrial, utility, sanitary, and storm water categories, in order to limit the volume of water requiring specialized treatment. Characteristics of individual streams may also be used for source segregation.
- Identify opportunities to prevent or reduce wastewater pollution through such measures as recycle/reuse within their facility, input substitution, or process modification (e.g. change of technology or operating conditions/modes).
- Assess compliance of their wastewater discharges with the applicable: (i) discharge standard (if the wastewater is discharged to a surface water or sewer), and (ii) water quality standard for a specific reuse (e.g. if the wastewater is reused for irrigation).

Additionally, the generation and discharge of wastewater of any type should be managed through a combination of:

- Water use efficiency to reduce the amount of wastewater generation.
- Process modification, including waste minimization, and reducing the use of hazardous materials to reduce the load of pollutants requiring treatment.
- If needed, application of wastewater treatment techniques to further reduce the load of contaminants prior to discharge, taking into consideration potential impacts of cross-media transfer of contaminants during treatment (e.g., from water to air or land).
- When wastewater treatment is required prior to discharge, the level of treatment should be based on:
- Whether wastewater is being discharged to a sanitary sewer system, or to surface waters.
- National and local standards as reflected in permit requirements and sewer system capacity to convey and treat wastewater if discharge is to sanitary sewer.
- Assimilative capacity of the receiving water for the load of contaminant being discharged wastewater if discharge is to surface water.

- Intended use of the receiving water body (e.g. as a source of drinking water, recreation, irrigation, navigation, or other).
- Presence of sensitive receptors (e.g., endangered species) or habitats.
- Good International Industry Practice (GIIP) for the relevant industry sector.

5.2 General Liquid Effluent Quality

Discharge to Surface Water

Discharges of process wastewater, sanitary wastewater, wastewater from utility operations or storm water to surface water should not result in contaminant concentrations in excess of local ambient water quality criteria or, in the absence of local criteria, other sources of ambient water quality. Receiving water use and assimilative capacity taking other sources of discharges to the receiving water into consideration, should also influence the acceptable pollution loadings and effluent discharge quality. Additional considerations that should be included in the setting of project-specific performance levels for wastewater effluents include:

- Process wastewater treatment standards consistent with applicable WBG Industry Sector EHS Guidelines. Project activities for which there are no industry-specific guidelines should reference the effluent quality guidelines of an industry sector with suitably analogous processes and effluents.
- Compliance with national or local standards for sanitary wastewater discharges.
- Temperature of wastewater prior to discharge does not result in an increase greater than 3°C of ambient temperature at the edge of a scientifically established mixing zone which takes into account ambient water quality, receiving water use and assimilative capacity among other considerations.

Discharge to Sanitary Sewer Systems

Discharges of livestock processing industrial wastewater, sanitary wastewater, wastewater from utility operations of the quality infrastructure or storm water into public or private wastewater treatment systems should:

- Meet the pretreatment and monitoring requirements of the sewer treatment system into which it discharges.
- Not interfere, directly or indirectly, with the operation and maintenance of the collection and treatment systems, or pose a risk to worker health and safety, or adversely impact characteristics of residuals from wastewater treatment operations.
- Be discharged into municipal or centralized wastewater treatment systems that have adequate capacity to meet local regulatory requirements for treatment of wastewater generated from the project. Pretreatment of wastewater to meet regulatory requirements before discharge from the project site is required if the municipal or centralized wastewater treatment system receiving wastewater from the project does not have adequate capacity to maintain regulatory compliance.

Land Application of Treated Effluent

The quality of treated process wastewater, wastewater from utility operations or storm water discharged on land, including wetlands, should be established based on local regulatory requirements. . Where land is used as part of the treatment system and the ultimate receptor is surface water, water quality guidelines for surface water discharges specific to the industry sector process should apply. Potential impact on soil, groundwater, and surface water, in the context of protection, conservation and

long-term sustainability of water and land resources should be assessed when land is used as part of any wastewater treatment system.

Septic Systems

Septic systems are commonly used for treatment and disposal of domestic sanitary sewage in areas with no sewerage collection networks, Septic systems should only be used for treatment of sanitary sewage, and unsuitable for industrial wastewater treatment. When septic systems are the selected form of wastewater disposal and treatment, they should be:

- Properly designed and installed in accordance with local regulations and guidance to prevent any hazard to public health or contamination of land, surface or groundwater.
- Well maintained to allow effective operation.
- Installed in areas with sufficient soil percolation for the design wastewater loading rate.
- Installed in areas of stable soils that are nearly level, well drained, and permeable, with enough separation between the drain field and the groundwater table or other receiving waters.

Sanitary Wastewater

Sanitary wastewater from livestock processing industrial facilities or quality infrastructure services may include effluents from domestic sewage, food service, and laundry facilities serving site employees. Miscellaneous wastewater from laboratories, medical infirmaries, water softening etc. may also be discharged to the sanitary wastewater treatment system. Recommended sanitary wastewater management strategies include:

- Segregation of wastewater streams to ensure compatibility with selected treatment option (e.g. septic system which can only accept domestic sewage);
- Segregation and pretreatment of oil and grease containing effluents (e.g. use of a grease trap) prior to discharge into sewer systems;
- If sewage from the industrial facility is to be discharged to surface water, treatment to meet national or local standards for sanitary wastewater discharges;
- If sewage from the industrial facility is to be discharged to either a septic system, or where land is used as part of the treatment system, treatment to meet applicable national or local standards for sanitary wastewater discharges is required.
- Sludge from sanitary wastewater treatment systems should be disposed in compliance with local regulatory requirements, in the absence of which disposal has to be consistent with protection of public health and safety, and conservation and long-term sustainability of water and land resources.

6. Water Conservation

Water conservation programs should be implemented commensurate with the magnitude and cost of water use. These programs should promote the continuous reduction in water consumption and achieve savings in the water pumping, treatment and disposal costs. Water conservation measures may include water monitoring/management techniques; process and cooling/heating water recycling, reuse, and other techniques; and sanitary water conservation techniques.

General recommendations include:

- Storm/Rainwater harvesting and use
- Zero discharge design/Use of treated wastewater to be included in project design processes

- Use of localized recirculation systems in plant/facility/shops (as opposed to centralized recirculation system), with provision only for makeup water
- Use of dry process technologies e.g. dry quenching
- Process water system pressure management
- Project design to have measures for adequate water collection, spill control and leakage control system

7. Hazardous Materials Management

These guidelines apply to projects that use, store, or handle any quantity of hazardous materials (Hazmats), defined as materials that represent a risk to human health, property, or the environment due to their physical or chemical characteristics. Typical example in the DRIVE project is the transportation, storage and use of pesticides. Hence, this guideline compliments the Guidelines on Pest Management Plan (***Annex 5***). Hazmats can be classified according to the hazard as explosives; compressed gases, including toxic or flammable gases; flammable liquids; flammable solids; oxidizing substances; toxic materials; radioactive material; and corrosive substances.

The overall objective of hazardous materials management is to avoid or, when avoidance is not feasible, minimize uncontrolled releases of hazardous materials or accidents (including explosion and fire) during their production, handling, storage and use. This objective can be achieved by:

- Establishing hazardous materials management priorities based on hazard analysis of risky operations identified through Environmental and Social Assessment;
- Where practicable, avoiding or minimizing the use of hazardous materials. For example, non-hazardous materials have been found to substitute asbestos in building materials, PCBs in electrical equipment, persistent organic pollutants (POPs) in pesticides formulations, and ozone depleting substances in refrigeration systems;
- Preventing uncontrolled releases of hazardous materials to the environment or uncontrolled reactions that might result in fire or explosion;
- Using engineering controls (containment, automatic alarms, and shut-off systems) commensurate with the nature of hazard;
- Implementing management controls (procedures, inspections, communications, training, and drills) to address residual risks that have not been prevented or controlled through engineering measures.

Subproject activities which manufacture, handle, use, or store hazardous materials should establish management programs that are commensurate with the potential risks present. The main objectives of projects involving hazardous materials should be the protection of the workforce and the prevention and control of releases and accidents. These objectives should be addressed by integrating prevention and control measures, management actions, and procedures into day-to-day business activities. Potentially applicable elements of a management program include the following:

- Hazardous assessment
- Management actions
- Preventive measures
- Control measures

8. Waste Management

A waste is any solid, liquid, or contained gaseous material that is being discarded by disposal, recycling, burning or incineration. It can be byproduct of a manufacturing process or an obsolete commercial product that can no longer be used for intended purpose and requires disposal.

Solid (non-hazardous) wastes generally include any garbage or refuse. Examples of such waste include domestic trash and garbage; inert construction/demolition materials; refuse, such as metal scrap and empty containers (except those previously used to contain hazardous materials which should, in principle, be managed as a hazardous waste); and residual waste from industrial operations, such as boiler slag, clinker, and fly ash.

Hazardous waste shares the properties of a hazardous material (e.g. ignitability, corrosivity, reactivity, or toxicity), or other physical, chemical, or biological characteristics that may pose a potential risk to human health or the environment if improperly managed. Wastes may also be defined as "hazardous" by local regulations or international conventions, based on the origin of the waste and its inclusion on hazardous waste lists, or based on its characteristics.

Sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations needs to be evaluated on a case-by-case basis to establish whether it constitutes a hazardous or a non-hazardous waste.

The GREPP in the DRIVE project proposes the subprojects or facilities that may generate wastes should practice the following:

- Establishing waste management priorities at the outset of activities based on an understanding of potential Environmental, Health, and Safety (EHS) risks and impacts and considering waste generation and its consequences.
- Establishing a waste management hierarchy that considers prevention, reduction, reuse, recovery, recycling, removal and finally disposal of wastes.
- Avoiding or minimizing the generation waste materials, as far as practicable.
- Where waste generation cannot be avoided but has been minimized, recovering and reusing waste.
- Mitigation measures that avoid or minimize the generation of nonhazardous and hazardous wastes and ensure the recycling, reuse, or safe disposal of such wastes generated by the project should be included in the project's contractor agreement.

Annex 5: Guidelines for Pest Management Plan (GPMP)

Part One: DRIVE Project Specific Guidelines

1. Introduction

The implementation of the proposed DRIVE project requires the preparation of a Pest Management Plan (PMP) that will be based on field evaluations of the local conditions undertaken by appropriate technical specialists with experience in participatory IPM. Such assessment will identify the main pest problems in association with the three subprojects describe below involving the use of pests and their contexts

(ecological, agricultural, public health, economic, and institutional) and develops specific operational plans to address these problems. Hazards associated with the transport, storage, handling, use and disposal of pesticides will be identified and assessed for the scale of their risks and impacts. Then, measures will be provided to reduce these hazards to a level that can be managed by the users among the project beneficiaries. A PMP will also include procedures for screening the possible pesticides applied in association with the undertaking of the three subprojects identified below.

This guideline provides background information and guidance for preparing a PMP for the DRIVE project. These guidelines are addressed primarily for the activities of the three subcomponents of the livestock value chains and market facilitation where there may be significant issues of pest management and pesticide use. At the same time, even small project-related activities might involve more modest need for pesticide use. In this case too, the preparation of the PMP will be needed but scaled appropriately to the nature of the subproject involve and its context. Backdrop to this, the subsequent sections provide guidance on the various elements of the IPM in the implementation of the DRIVE.

2. Subcomponents identification and risk assessment

The potential risks and impacts of inappropriate pest management are identified with Component 2 of the project which has three important subcomponents: 2.1 upgrading quality infrastructure, 2.2 trade facilitation and trade logistics, and 2.3 seed capital to attract private investment in the value chains. The activities in all the three subcomponents involve the use of diverse pesticides with possible risks and impacts of inappropriate pest management (for details of these subprojects refer to ***Annex A***). Hence, the GPM for the DRIVE proposes the preparation and implementation of the subcomponent specific IPM. The implementation of DRIVE expects that the PMP needs to identify, assess risks and impacts and develop mitigation measures that are proportional to the scale and type of pesticide applies in the respective subcomponent.

Pesticide is defined as any substance or mixture of substances or microorganisms including viruses, intended for repelling, destroying or controlling any pest, including vectors of human or animal disease, nuisance pests, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of livestock products or animal feeding stuffs; or which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as insect or plant growth regulators; defoliants; desiccants; agents for setting; and substances applied to process livestock products or to protect the processed livestock products from deterioration during storage and transport.

3. Requirements for a Pest Management in DRIVE Project

The requirement of the implementation of the DRIVE project makes the following governing principles of the IPM:

- For any project activity/subcomponent involving significant pest management issues or any project contemplating activities that may lead to significant pest and pesticide management issues, the MoA will prepare a PMP.
- In the procurement of any pesticide for use in the DRIVE project the MoA will assess the nature and degree of associated risks, taking into account the proposed use and the intended users. Likewise, the MoA or project beneficiaries in need will not use any pesticides or pesticide products or formulations unless such use is in compliance with the EHSGs. Yet, the project implementing agency or project beneficiaries in need will not use any pesticide products that contain active ingredients that are restricted under applicable international conventions and

national laws or their protocols or that are listed in or meeting the criteria of their annexes, unless for an acceptable purpose as defined by such conventions, their protocols, or annexes.

- The project beneficiaries in need will not use any formulated pesticide products that meet the criteria of carcinogenicity, mutagenicity or reproductive toxicity as set forth by relevant international agencies. For any other pesticide products that pose other potentially serious risk to human health or the environment and that are identified in internationally recognized classification and labeling systems, the project beneficiaries in need will not use pesticide formulations of products if: (a) the country in consideration lacks restrictions on their distribution, management, and use; or (b) they are likely to be used by or be accessible to lay personnel, local communities or others without training, equipment, and facilities to handle, store, and apply these products properly.
- The requirements for pest management in DRIVE project apply the following additional criteria in the selection and use of pesticides: (a) they will have negligible adverse human health effects; (b) they will be shown to be effective against the target species; and (c) they will have minimal effect on non-target species and the natural environment. The methods, timing, and frequency of pesticide application are aimed to minimize damage to natural enemies. Pesticides used in public health programs (if there is any) will be demonstrated to be safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them; (d) their use will take into account the need to prevent the development of resistance in pests; and (e) where registration is required, all pesticides will be registered or otherwise authorized for use on the livestock and for livestock processing industry, or for the use patterns for which they are intended under the project.
- If pesticides are applied for whatever purpose of the project, training and awareness raising are required for personnel handling and applying pesticides to avoid harm to personnel and avoid environmental issues like surface and groundwater pollution, wind drift beyond the targeted area, and other adverse side effects.
- The MoA or its implementing entities will ensure that all pesticides used by the project beneficiaries in need are manufactured, formulated, packaged, labeled, handled, stored, disposed of, and applied according to relevant international standards and codes of conduct, as well as the EHSGs.

4. Objectives of the GPM in DRIVE

The Guidelines for a Pest Management (GPM) are to set out the framework for the preparation of suitable PMP and effective implementation in the DRIVE project with the objective to:

- Avoid, minimize or mitigate the adverse risks and impacts from the inappropriate pest management of the project on human and animal health. This includes preventing accidental poisoning resulting from handling, storage, transport, use or disposal, as well as from the presence of pesticide residues in food and feed.
- Avoid, minimize or mitigate the adverse environmental risks and impacts from the inappropriate pest management in the course of DRIVE project implementing. The main environmental concerns about pesticides relate to water and soil contamination, negative effects of pesticides on the natural resource base (biodiversity, natural pest control mechanisms, pollinators, soil ecology, etc.) and bioaccumulation and its effects on wildlife.

5. Proposed Elements for a PMP in the DRIVE Project

The minimum standards of the preparation of a PMP for the DRIVE project should comprise the following key elements.

Introduction:

- Project background
- Subcomponents identification for IPM
- Requirements of PMP
- Objectives of the PMP

Policies and regulatory frameworks for pest management

Review of the national and international policies and regulatory frameworks applicable for the pest management in DRIVE. Relevant topics in this section include the following.

National regulatory framework:

This section provides description and assessment of the country's regulatory framework and institutional capacity for control of the distribution and use of pesticides. The description and assessment focus on:

- Has pesticide legislation been enacted?
- Is it adequate and properly enforced?
- Is a pesticide registration scheme functioning?
- Assess effectiveness of measures to limit access to Class II pesticides to licensed users if the use of such products is proposed.
- Does the government monitor the quality of imported pesticides?
- Is there a quality control laboratory?
- Does the government actively monitor pesticide use and storage?
- Are pesticide residues being monitored on export crops and corps for the domestic market?

International policies and regulatory framework

- Relevant World Bank Policies and regulatory framework
- WHO Classification of Pesticide by Hazard and the Guidelines to Classification (2009)
- WHO Guidelines on Public Health Pesticide Management Policy (2011)
- The International Code of Conduct on Pest Management (FAO and WHO 2014)
- International Plant Protection Convention of FAO (1952)
- World Food Security and the Plan of Action (1996)

Pest Management Approach in DRIVE Project:

a) Describe the current and anticipated pest problems relevant to the project. Also provide estimated economic impacts associated with the identified pest problems.
b) Current and proposed pest management practices in the project: Describe current and proposed practices, including non-chemical preventative techniques, biological and chemical control. Is optimum use being made of agro-ecosystem management techniques to reduce pest pressure and of available non-chemical methods to control pests? IPM approaches that reduce reliance on chemical control?
c) Describe relevant IPM experience within the project area/region and Ethiopia in general
d) Assessment of proposed or current pest management approach: Where the current or proposed practices are not consistent with the principles of an IPM approach, the discrepancies should be

discussed and a strategy should be proposed to bring pest management activities of the project into line with IPM.

Pesticide Management:

a) Describe the proposed and/or envisaged pesticide use in DRIVE project. Provide purpose of pesticide use, type of products used, frequency of applications, and application methods. Justification of pesticide use under the project should: (a) explain the IPM approach and the reason why pesticide use is considered; (b) provide an economic assessment demonstrating that the proposed pesticide use in the project would increase project beneficiaries' net profits; and (c) provide evidence that the proposed pesticide use is justified from the best available (preferably WHO supported) public health evidence.
b) Indication of type and quatity of pesticides envisaged to be finacned by the project (in volume and monitory value) and/or assessment of increase in presticide use resulting from the project subcomponents identified above.
c) Circumstacnes of pesticide use and the capability and competence of end-users to handle the products within acceptable risk margins.
d) Assessment of potential environemntal, occuaitonal and public health risks associated with the transort, storge, handling and use of the proposed pesticides in the project under local circumstances and the disposal of empty containers.
e) Pre-requisites and/or measures required to reduce specific risks and associated with envisaged pesticide use under the project (e.g. protecive gears, training, upgrading of storage facilities etc)
f) Selection of pesticides authorized for use, taking into consideraiton: (a) criteria listed below; (b) the hazards and risks as set out in WHO's classicaiton stated below; and (c) availaility of newer and less hazardous products and techniques (e.g. bio-esticide, traps etc)

Monitoring and Supervision:

a) Description of activities that require local monitoring during implementation.
b) Description of activities that require monitoring during supervision visits (e.g. regarding effectiveness of measures to mitigate risks; progress in strengthening regulatory frameworks and institutional capacity; identification of new issues or risks arising during implementation).
c) Monitoring and supervision plan, implementation responsibilities, required expertise and budget.

Part Two: General Guidelines

1. What is Integrated Pest Management (IPM)?

Where any project activities involve recourse to pest management measures, the implementation of the DRIVE project will give preference to planning for the IPM approach. *IPM* refers to a mix of user-driven, ecologically based pest control practices that seeks to reduce reliance on synthetic chemical pesticides. It involves: (a) managing pests (keeping them below economically damaging levels) rather than seeking to eradicate them; (b) integrating multiple methods (relying, to the extent possible, on nonchemical measures) to keep pest populations low; and (c) selecting and applying pesticides, when they have to be used in a way that minimizes adverse effects on beneficial organisms, humans, and the environment.

The main features of IPM are the use of non-chemical methods of pest control. IPM technical tool includes:

a) Biological controls: The use of natural enemies, often called beneficial, which include parasites, predators, and insect pathogens.
b) Cultural and crop or livestock management controls: These comprises tissue culture, disease-free seed, trap crops, cross protection, cultivation, refuse management, mulching, field sanitation, crop rotations, grazing rotation and intercropping.
c) Strategic controls: These include planting location, timing of planting and timing of harvest.
d) Genetically based controls: These include insect and disease resistant varieties and root stock. Environmentally-friendly chemical interventions are sometimes included in biological controls such as the use of semi chemicals including pheromones and feeding attracts and bio-pesticides (e.g., specific and beneficial friendly insecticides)

2. Reducing Health and Environmental Risks from Pesticides

Efforts to reduce health and environmental risks are important because pesticides are toxic and have the potential to harm users, the public and the environment. Moreover, government regulatory schemes are often inadequate in offering protection, and pesticide users often do not have the necessary application equipment, protective gear and knowledge to manage the hazards associated with pesticide use. In general, IPM strategies should reduce reliance on chemical control and contribute to reducing health and environmental risks.

Groups that may encounter health problems as a result of exposure to pesticides include:

- Users/applicators;
- Bystanders and people living next to treated areas (drift);
- Farmers working in treated areas;
- Processors of treated crops; pesticide distributors;
- Workers in the industrial plants of pesticide manufacturers/formulators
- Pesticide storekeepers;
- Consumers of treated crops or contaminated water; and
- Consumers of dairy products from livestock fed with contaminated crops.
- The main health and environmental risks are:
- Acute poisoning (death, light to severe sickness, respiratory problems, etc.);
- Chronic poisoning (cancer, birth defects, reproductive disorders, skin problems, , impairment of immune system capabilities, etc.);
- Water, soil and air contamination;
- Impact on non-target organisms, including aquatic organisms, birds and wildlife; and
- Impact on the diversity of animal and plant species in an area.

The main steps involved in reducing risks from pesticides are:

1) Reduce pesticide use by making optimum use of non-chemical pest control methods;
2) Where chemical control remains necessary, identify health and environmental risks;
3) Carefully select products and application techniques to minimize impact on health and the environment; and
4) Design and implement risk reduction measures.

3. Screening Pesticides

The use of any pesticide should be based on an assessment of the nature and degree of associated risks, taking into account the intended users. With respect to the classification of pesticides and their specific

formulations, the World Bank refers to the World Health Organization's *Recommended Classification* of *Pesticides by Hazard and Guidelines to Classification.*

The World Bank requires that the following criteria apply to the selection and use of pesticides:

a) They must have negligible adverse human health effects.
b) They must be shown to be effective against the target species.
c) They must have minimal effect on non-target species and the natural environment. methods, timing, and frequency of pesticide application are aimed at minimizing damage to natural enemies. Pesticides used in public health programs must be demonstrably safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them.
d) Their use must take into account the need to prevent the development of resistance in pests.
e) They do not fall in WHO classes IA and IB, or formulations of products in class II if: (a) country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment and facilities to handle, store, and apply these products properly.

4. When is Pesticide Use justified under an IPM Approach?

In many cases, present levels of pesticide use are unnecessarily high, uneconomic and unsustainable. There often is a narrow focus on chemical control without considering available alternative non-chemical pest management techniques that are more sustainable. Determining the justification of pesticide use involves both technical and economic factors:

- Technical justification: Is the proposed use part of an IPM approach?
- Economic justification: Will the proposed use have a positive effect on farmer profits that is not offset by additional hidden and external costs?

Technical Justification

Justifying pesticide use under an IPM approach is best done by examining current practice and experience, and considers a variety of factors. Note that the justification of pesticide use under an IPM approach involves much more than safe handling and judicious use of pesticides.

Pesticide use can be considered to be in line with IPM principles if:

- Users are aware of non-chemical techniques to prevent or control pests, and understand the ecological, health and economic risks of pesticide use.
- Various non-chemical methods of agro-ecosystem management are used to keep pest populations low. Preventing pests and diseases is a major component of the strategy.
- Decisions to apply pesticides as supplement and control are made locally, are made locally monitoring of pest incidence, and are site-specific.
- Selection of pesticides is based on minimizing negative impact on the agro-ecosystem.
- Use of non-conventional pest control practices (biological control, biopesticides, growth regulators, pheromones, etc.) is considered before considering application of conventional pesticides.
- Judicious and selective use of pesticides is employed when compatible with the use of pest management practices or when other economically viable alternatives are not available, when damage or loss levels are exceeding thresholds, and other control methods have failed.
- Application techniques are selected that minimize impact on the agro-ecosystem.

- Use of pesticides is economically justifiable in terms of having a positive effect on net farm profits that is not offset by increased short- and long-term risks 'to health, environment or profit.
- Compared to present practices, proposed pesticide use diminishes the social costs of pesticide use such as environmental and health costs.
-
- Pesticide use is most probably not in line with IPM principles if:
- Pesticides are the single or primary means of pest management (including weed or rodent control).
- Pest control schemes are based on calendar spraying rather than on scouting or monitoring for pests.
- Input or rural credit packages obligate inclusion of chemical pest control.
- Centrally designed pest control schemes are followed that do not take into account local conditions and seasonal variations.
- Pesticide use is likely to lead to long term dependency, pest resurgence, secondary pest outbreaks or pest resistance.
- Farmers are not involved in taking decisions to apply pesticides.
- Pesticide distribution is free or subsidized.
- Persistent and/or non-selective pesticides are used, such as broad-spectrum pesticides, that significantly affect non-target organisms and reduce the natural control capacity of the agro-ecosystem.
- There is no economic analysis demonstrating the positive impact of pesticide use on farmers' net incomes.
- There is no evidence demonstrating cost-effectiveness in terms of public health gains for pesticides used in disease vector control.
- There are evident environmental contamination and health risks.
- Farmers receive advisory services from organizations that sell pesticides.

Economic Justification:

Case studies indicate that, in developing countries, the external costs per unit of pesticide expenditure sometimes may be as high as the private costs. It is always important to ask:

- What is the anticipated magnitude of economic damage caused by the pest problem?
- Is the assessment of damage based on accurate and representative field data?
- What are the direct and indirect costs of chemical pest control?
- What alternatives are available and how do the costs compare?
- Does the envisaged damage justify the expenditure?
- It is important to consider the economics of pesticide use since there often is a tendency to focus solely on the technical issue of protecting a crop, without considering the costs and benefits. In many cases the economics of pesticide use are questionable, and pesticide use levels are often above their economic optimum. Moreover:
- Negative environmental and social costs are often not considered.
- Indirect costs such as transport, storage, protective gear, application equipment and health costs (doctors' fees, medicine, loss of labor) are often not considered.
- Estimates of crop damage are often based on exaggerated extrapolations that are not supported by accurate field data. The ability of plants to recover from damage is often overlooked.
- Crop damage is often expressed in loss of yield, instead of loss of farmer income.

- The economics of pesticide use are rarely compared to those of alternative approaches.

An assessment of the economics of pesticide use should, as much as possible, take into consideration the broad range of direct and indirect costs. The true cost of pesticide use includes both the private farm household costs and the social costs associated with damage and/or prevention. These can include hidden and external costs that are often' difficult to determine.

Obvious private costs at the user's level:

- Cost of pesticides (farm gate price).
- Farmer's cost of transport, storage and disposal.
- Cost of application (hired labor, opportunity cost of family labor, spraying.
- Cost of protective gear and other risk reduction measures.

Hidden private costs:

- Acute and chronic health effects of pesticide poisoning (medical treatment, lab productivity loss).
- Reduction of beneficial organisms and other functions of the agro-ecosystem.
- Build-up of on-farm pest resistance.
- On-farm production loss due to negative side effects (crop damage due to pesticide drift; losses in animal, honeybee, fish production).
- Decreased marketability of produce due to high pesticide residue levels.

External costs:

- Health damage to the public through consumption of pesticide residues and exposure to contaminated material.
- Damage to natural resources (ground and surface water, natural habitats, biodiversity).
- Off-farm losses in crop and animal production food and water, avoidance of pesticide contamination).
- Regulatory control (pesticide registration, monitoring and law enforcement).
- Costs of preventative measures to avoid damage (e.g. residue monitoring and control in food and water, avoidance of pesticide contamination).
- Regulatory control (pesticide registration, monitoring and law enforcement).

5. Pesticide Application

If pesticide application is warranted, users are recommended to take the following safety measures:

Train personnel to apply pesticides and ensure that personnel have received applicable certifications or equivalent training where such certifications are not required.

Review and follow the manufacturer’s directions on maximum recommended dosage or treatment as well as published reports on using the reduced rate of pesticide application without loss of effect, and apply the minimum effective dose.

Avoid routine “calendar-based” application, and apply pesticides only when needed and useful based on criteria such as field observations, weather data (e.g. appropriate temperature, low wind, etc.).

Avoid the use of highly hazardous pesticides, particularly by uncertified, untrained or inadequately equipped users. This includes: (a) pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Classes 1a and 1b should be avoided in almost all cases, to be used only when no practical alternatives are available and where the handling and use of

the products will be done in accordance with national laws by certified personnel in conjunction with health and environmental exposure monitoring; (b) pesticides that fall under the World Health Organization Recommended Classification of Pesticides by Hazard Class II should be avoided if the project host country lacks restrictions on distribution and use of these chemicals, or if they are likely to be accessible to personnel without proper training, equipment, and facilities to handle, store, apply, and dispose of these products properly.

Avoid the use of pesticides listed in Annexes A and B of the Stockholm Convention, except under the conditions noted in the convention and those subject to international bans or phase outs.

Use only pesticides that are manufactured under license and registered and approved by the appropriate authority and in accordance with the Food and Agriculture Organization's (FAO's) International Code of Conduct on the Distribution and Use of Pesticides.

Use only pesticides that are labeled in accordance with international standards and norms, such as the FAO's Revised Guidelines for Good Labeling Practice for Pesticides.

Select application technologies and practices designed to reduce unintentional drift or runoff only as indicated in an IPM program, and under controlled conditions.

Maintain and calibrate pesticide application equipment in accordance with manufacturer's recommendations. Use application equipment that is registered in the country of use.

Establish untreated buffer zones or strips along water sources, rivers, streams, ponds, lakes, and ditches to help protect water resources.

Avoid use of pesticides that have been linked to localized environmental problems and threats.

6. Identifying and Managing the Risks of Pesticides

Pesticides should have minimal effect on non-target species and the natural environment and especially on predators of common pests that may affect the crop concerned. Ignoring this requirement may lead to further pest outbreaks with significant negative effects on yields and unnecessary 'increase in cost of chemical control. Factors relevant to a hazard/risk are:

Health related risk assessment factors:

Toxicity of the product, intensity of use, and mode of application.
User-knowledge about the product, its associated hazards and management of these hazards.
Traderl distributors knowledge about the product.
Availability of adequate and affordable protective gear, and its actual use.
Availability of appropriate application equipment.
Availability of appropriate storage facilities.
Disposal practices for leftover pesticides, empty containers and rinsing water by end users
Occupational safety and risk reduction methods for persons handling and using the product.
Risk of residues on treated food crops.
Risk of contamination of water resources.

Environment related risk assessment factors:

Impact on agro-ecosystem and beneficial non-target organisms (natural enemies of potential pests, pollinators, ants, earth worms, fish, etc.)
Impact on aquatic organisms and wildlife
Risk of unintended exposure (drift, spills)
Persistence of the product (half-life)
Behavior and toxicity of break down products

General factors:

Adequacy of regulations
Institutional ability to implement/enforce regulations
Risks of unauthorized use (product or use are not approved by local regulatory authority)
Risks associated with transport and storage
Reducing the risk of pesticides involves the development of measures appropriate to the scale, type and context of their use.

Use:

Sufficient quantities of appropriate protective gear for pesticide users, taking into consideration recommended replacement schedules.
Appropriate application equipment with spare parts.
Training in risk reduction including proper use of protective gear and proper application of products.
Impact monitoring.
Where relevant, additional labels in the local language.

Storage:

Appropriate storage facilities.
Appropriate protective gear and materials for store keepers to handle emergencies.
Material Safety Data Sheets (product information with emergency instructions).

Treatment of poisoning: for products that may cause intoxication of users:

Training of relevant medical staff in recognition and treatment of poisoning cases
Antidotes for use at hospitals or health posts in the areas where the products may be used

Minimum requirements for a pesticide storage facility are:

Impermeable floor;
Adequate ventilation;
Lockable door;
Secured site;
Location that does not pose specific health or environmental hazards (distance from homes, schools and water);
Managed by store-keeper with knowledge about hazards, and capable of handling leakage and other emergencies; and
Emergency materials and protective gear needed to deal with emergencies (including emergency plan, Material Safety Data Sheets for products kept in store, fire extinguisher, emergency shower for staff).

Annex 6: Guidelines for Underserved Communities Plan (GUCP)

1. Introduction

Risks and adverse impacts of the DRIVE on Underserved Communities (UCs) UCs) are expected from the undertaking of both the activities in Component 1 and Component 2 of the project. To mitigate the

adverse impacts, thus, the ESMF proposes the preparation of the IPP. An acceptable IPP is required based on the detail information before the project is approved for implementation. The guidelines for preparing an IPP are described below.

2. The General Principles of GUCP

- IPP is prepared and implemented in the recognition of the principle that UCs have identities and aspirations that are distinct from mainstream groups in national societies and often are disadvantaged by traditional models of development. In many instances, they are among the most economically marginalized and vulnerable segments of the population. Their economic, social, and legal status frequently limits their capacity to defend their rights to, and interests in, land, territories and natural and cultural resources, and may restrict their ability to participate in and benefit from development projects. In many cases, they do not receive equitable access to project benefits, or benefits are not devised or delivered in a form that is culturally appropriate, and they may not always be adequately consulted about the design or implementation of projects that would profoundly affect their lives or communities.
- The preparation and implementation of the UCP makes the principle that UCs have their own understanding and vision of their well-being and that, broadly, this is a holistic concept that relates to their intrinsic relationship to lands and traditional practices and is reflective of their way of life. This captures their core principles and aspirations of reaching harmony with their surroundings, and achieving solidarity, complementarity and communal living.
- The situation of UCs varies from region to region and from country to country. The particular national and regional contexts and the different historical and cultural backgrounds. This informs that, besides project's social and environmental assessment, understanding the particular environmental, social and economic situations of the UCs needs the undertaking of Targeted Social Assessment (TSA). The preparation and implementation of the UCP should depend on detailed information generated through TSA rather than the environmental and social assessment for the proposed project in general.
- The preparation and implementation of the UCP depends on the principle that the roles of men and women in indigenous cultures are often different from those in the mainstream groups, and that women and children have frequently been marginalized both within their own communities and as a result of external developments, and may have specific needs.
- The preparation and implementation of the UCP contributes to poverty reduction and sustainable development by ensuring that projects supported by the WB enhance opportunities for UCs to participate in, and benefit from, the development process in ways that do not threaten their unique cultural identities and well-being.

3. Objectives of the UCP

- To ensure that the development process from the implementation of DRIVE fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of the UCs in the project areas.
- To avoid adverse impacts of the project activities on the IP/UCs or when avoidance is not possible, to minimize, mitigate, and/or compensate for such impacts.
- To promote sustainable development benefits and opportunities for the UCs in a manner that is accessible, culturally appropriate, and inclusive.

- To improve project design and promote local support by establishing and maintaining an ongoing relationship based on meaningful consultation with the UCs affected by the project throughout the project's life cycle.
- To obtain the Free, Prior, and Informed Consent (FPIC) of the affected UCs in the case of project-related land acquisition and/or restriction on land use following the circumstances described in ESS7.
- To recognize, respect, and preserve the culture, knowledge, and practices of the project-affected UCs and to provide them with an opportunity to adapt to changing conditions in a manner and in a time frame acceptable to them.

4. Requirements for UCP

The Borrower will assess the nature and degree of the expected direct and indirect economic, social, cultural (including cultural heritage), and environmental impacts from the proposed DRIVE project on UCs who are present in, or have collective attachment to, the project area. Thus, the preparation of UCP needs conducting Targeted Social Assessment (TSA) besides the ESIA for the project in general.

Justifying in view of the concept of collective identity and collective attachment to land, the project-affected UCs may be particularly vulnerable to the loss of, alienation from or exploitation of their land and access to natural and cultural resources resulting from project-related land acquisition or restriction on land use. In recognition of this vulnerability, the Borrower will require obtaining Free, Prior and Informed Consent (FPIC) of the affected HUPCs in circumstances in which project-related land acquisition or restriction on land use will:

- Have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation of the HUPCs;
- Cause relocation of HUPCs from land and natural resources subject to traditional ownership or under customary use or occupation; or
- Have significant impacts on the affected HUPCs' cultural heritage that is material to their identity and/or cultural, ceremonial, or spiritual aspects.

5. Use of Terminology

Despite sharing the defining criteria, the kind of distinct social and cultural group referred to above in the principles of the UCP is termed differently in different countries. Such terms include Sub-Saharan African Historically Underserved Traditional Local Communities, Indigenous Ethnic Minorities, Aboriginals, Hill Tribes, Vulnerable and Marginalized Groups, Minority Nationalities, and Scheduled Tribes. Given the historical, socio-economic and political contexts of the proposed target groups in DRIVE project on the one hand and the Ethiopian Constitutional and legal framework on the other, the GoE prefers the usage of the term *Historically Underserved Pastoral Communities (HUPCs)* rather than Indigenous Peoples (IP) or Sub-Saharan Historical Underserved Traditional Local Communities (UCs). As the applicability of the term "Indigenous Peoples" varies widely from country to country, the MoA may request the Bank to use this alternative terminology for the IP or SSHTLCs as appropriate to its national context.

6. **Screening Criteria**

Unlike difference in the usage of terminology, the screening criteria of the GoE and WB are consistent to identify the kind of distinct social and cultural group referred in the preparation and implementation of the UCP. Accordingly, the GoE makes four screening criteria, namely: self-identification and recognition

as distinct cultural group; attachment to land and natural resources; social institution and organization distinct from mainstream society; and indigenous language. Whereas, the WB ESS screening criteria refer to a distinct social and cultural group possessing the following characteristics in varying degrees:

- Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others.
- 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.
- Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture.
- A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.
- In the preparation and implementation of the UCP, central to the aforesaid screening criteria is the need to focus on:
- Collective identity that understood to apply to groups or communities rather than individuals
- Collective attachment signifies that the groups generally consider their lands and resources to be collective assets. It also signifies that these groups' economies, modes of production, social organization, and cultural and spiritual circumstances are generally linked to particular territories and natural resources. The concept of collective attachment refers to geographically distinct habitats or ancestral territories, or areas of seasonal use or occupation and the natural resources therein.

7. Required Qualification for the Preparation of the UCP

The engagement of appropriate specialists to provide technical advice and assistance regarding application of ESS7 is important, for example, when there are circumstances or vulnerabilities of UCS, or national legislation and general socioeconomic data provide only general information rather than specific data regarding the groups that may be present. The specialists should have proven familiarity with social science research methods, and extensive knowledge and working experience with the subject of UCS in the country or region. Projects affecting IP/ SSAHUTLC may also benefit from ongoing input from appropriate specialists, for example, in assisting the Borrower to better understand the characteristics, issues, and priorities of the UCS, their governance structures and decision-making processes, and establishing appropriate assessment and consultation mechanisms.

Annex A: Targeted Social Assessment for the Purpose of UCP

The Borrower will assess the nature and degree of the expected direct and indirect economic, social, cultural (including cultural heritage), and environmental impacts from the proposed DRIVE project on IP/UCs who are present in, or have collective attachment to, the project area. Thus, the preparation of UCP needs conducting Targeted Social Assessment (TSA) besides the ESIA for the project in general. The focus of the Targeted Social Assessment includes the following themes.

1. The breadth, depth, and type of analysis of the social assessment is proportionate to the potential risks and impacts of the proposed project on the affected UCS.
2. The social assessment includes the following elements, as needed:
   - A review of the legal and institutional framework applicable to UCS.
   - Gathering of baseline data on the demographic, social, cultural, and political characteristics of the project-affected UCS, the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.

- Taking the review and baseline data into account, the identification of project-affected parties and the elaboration of a culturally appropriate process for involving and consulting with the project-affected UCS at each stage of project preparation and implementation.
- An assessment, based on meaningful consultation tailored to UCS, of the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is an analysis of the relative vulnerability of, and risks to, the affected UCS, given their distinct circumstances and close ties to land and natural resources, as well as their potential lack of access to opportunities relative to other social groups in the communities, regions, or national societies in which they live. The assessment should consider differentiated gender impacts of project activities and impacts on potentially disadvantaged or vulnerable groups within the community of UCS.
- The identification and evaluation of measures necessary to avoid adverse impacts, or if such measures are not feasible, the identification of measures to minimize, mitigate, or compensate for such impacts, and to ensure that the UCS receive culturally appropriate benefits under the project. This is based on meaningful consultation tailored to UCS and, where relevant, pursuant to the requirements of the UCP described above in the guidelines on Free, Prior, and Informed Consent
- Designing plans to promote access to benefits or measures to mitigate adverse impacts on UCS. It is important to include, in an analysis of vulnerability, factors such as UCSs' economic, social, and legal status; tenure security; their institutions, customs, culture, and/or language; their dependence on natural resources; their prior experiences with development activities; and their past and ongoing relationship to the authorities, the mainstream economy, and other groups in the area.

Annex B: Proposed Contents of the UCP

The purpose of the UCP is to establish the requirements of ESS7, organizational arrangements, and design criteria to be applied to subprojects or project components to be prepared during project implementation when UCS are present in, or have collective attachment to, the project area. Following identification of the subproject or individual project components and confirmation that UCS are present in or have collective attachment to the project area, a specific plan, proportionate to potential risks and impacts, is prepared. Project activities that may affect UCS do not commence until such specific plans are finalized and approved by the Bank. At minimum, the elements or contents of the proposed UCP should include the following topics.

Legal and institutional framework

- The legal recognition of ancestral domain and the traditional rights of the HUPCs over land and natural resources;
- The recognized legitimacy of the indigenous social and legal institutions of the HUPCs.
- Recognition of the right of HUPCs to direct the course of their own development and change.
- Assessment of risks and impacts
- The findings of the Targeted Social Assessment present on the environmental, social and economic risks and impacts due to the implementation of the proposed project.
- It identifies the nature and extent of risks and impacts from the proposed project are the key inputs in designing the mitigation measures proposed in the UCP.
- Mitigation measures

- Measures to avoid, minimize, mitigate, or compensate UCS for any potential adverse impacts that were identified in the social assessment, and steps for implementing them.
- The findings of the Targeted Social Assessment help to design for the kind of mitigation measures proposed in line with the risks and impacts of the project.
- Also, the assessment findings help to screen for the appropriate IP/UCs for consideration in the designed mitigations. Opportunities for benefit sharing are considered as distinct from compensation for adverse impacts, and address the longer-term sustainable development of the affected IP/UCS.

Meaningful Consultation Tailored to the affected IP/UCs

The meaningful consultation tailored to the affected IP/SSHTLCs is a two-way process, that:

- Begins early in the project planning process to gather initial views on the project proposal and inform project design.
- Encourages the affected IP/SSHTLCs' feedback, particularly as a way of informing project design and engaging the affected IP/SSHTLCs in the identification and mitigation of environmental and social risks and impacts.
- Continues on an ongoing basis.
- Is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful, and easily accessible information in a time frame that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s) and understandable to the affected IP/SSHTLCs
- Considers and responds to IP/SSHTLCs' feedback.
- Supports active and inclusive engagement with project-affected IP/SSHTLCs.
- Is free of external manipulation, interference, coercion, discrimination, and intimidation.
- Is documented and disclosed by the Borrower.
- Approaches to meaningful consultation are most effective when they build on existing customary institutions and decision-making processes utilized by the affected UCS. The capacity of the existing institutions and decision-making processes to address any new issues that may arise due to the project are analyzed as part of the targeted social assessment and in consultation with the UCS. Based on this analysis, additional measures to improve capacity can be put into place as necessary.
- Identification of appropriate representation of UCS is an important part of the process to establish FPIC. These are the individuals who are considered by the majority of the affected UCS to be the legitimate authorities to make decisions on collective support on their behalf.

Grievance Redress Mechanisms

- Examples of grievances of affected UCS include lack of information on the project and its impacts, inadequacy of compensation, failure of the Borrower to communicate or deliver on agreed action plans, or benefits that are considered culturally inappropriate. To address the problem, detailed information on grievance mechanisms is provided.
- The grievance mechanism is proportionate to the potential risks and impacts of the project, and should be accessible and inclusive. A well-functioning mechanism receives and facilitates resolution of grievances promptly and protects against reprisals for the use of its services.
- Grievance mechanisms take into account the cultural attributes of the project-affected UCSs and their traditional mechanisms for raising and resolving issues. Some UCS may prefer verbal, as opposed to written, methods of expressing grievances. The grievance mechanism is designed to

address these, and any other relevant considerations. The grievance mechanism should be designed in consultation with the project-affected UCSs.

Implementation arrangements

- Institutional arrangements, including capacity building where necessary, for screening project-supported activities, evaluating their effects on UCS, preparing UCS Plans, and addressing any grievances.

Monitoring and reporting arrangements

- Monitoring and reporting arrangements, including mechanisms and benchmarks appropriate to the project.

Annex 7: Chance Finds Procedure (CFP)

1. Introduction

The Chance Finds Procedure (CFP) for the DRIVE project is prepared as the requirement of ESS8 that addresses about issues of cultural heritage management in the project areas. This recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present, and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. Backdrop to this underlying conception, ESS8 sets out measures designed to protect cultural heritage throughout the project life cycle.

A chance find is any unanticipated discovery or recognition of cultural heritage. It is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during the undertaking of the project activities. It will be included in all contracts relating to construction activities of the project involving excavations, demolition, movement of earth or other changes in the physical environment. The chance finds procedure will set out how chance finds associated with such activities of the DRIVE project will be managed.

2. Scope of cultural heritage

As it applies in the preparation of this CFP, the term *cultural heritage* encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national or global level, as follows:

- Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water.
- Intangible cultural heritage, which includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artifacts and cultural spaces associated therewith—that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

- Cultural heritage may be recognized and valued for many reasons, including:
- Social and spiritual value of historic and present connections to existing communities;
- Scientific importance as a source of archaeological or historical evidence;
- Contextual value inherent in its condition, completeness, rarity, artistic or aesthetic qualities, or provenance; and
- Economic value as a generator of income from tourism and other commercial activities.

Given the above stated broader scope of cultural heritage, the requirements of ESS8, ESS7 (as it sets out additional requirements for cultural heritage in the context of Indigenous Peoples) and ESS6 (as it recognizes the social and cultural values of biodiversity) will apply to the need for managing the potential risks and impacts from the three subprojects under Component 2. Because the undertaking of these subprojects may risk the cultural heritage as their activities involve:

a) Construction that necessitates excavations, demolition, or movement of earth;
b) Other changes in the physical environment including pollution (air, water, soil, and biodiversity, ecosystem) and waste (liquid as well as soil) generation;
c) Project-related land acquisition that may change or restrict the functions of a legally protected area such parks or a legally defined buffer zone; or
d) Operation site that is within, or in the vicinity of, a recognized cultural heritage site.

Therefore, it is important to consider the risks and impacts of the subprojects under Component 2 on cultural heritage at all stages of the project cycle. Appropriate mitigation measures should be designed as part of the environmental and social management.

3. Objectives of the DRIVE CFP

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.
- To address cultural heritage as an integral aspect of sustainable development outcomes of the project.
- To promote meaningful consultation with stakeholders regarding cultural heritage.

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4. Chance Finds Procedure

Early attention to cultural heritage is particularly important as its presence may need to be considered in the design of, and during, the project implementation. The ESIA should provide detail information regarding any nationally or sub-nationally recognized cultural heritage sites in the project areas. For the purpose of the DRIVE project, a chance finds procedure covers the identification, notification, documentation, assessing potential impacts, and management of chance finds.

4.1 Identification

Cultural heritage may have different values for different individuals or groups, regardless of whether it has been legally protected or previously identified or disturbed. For example, a local shrine may be important for traditional religious worship, but may be unknown or not considered significant by national cultural heritage authorities. In some cases, archaeological evidence, both on and beneath the surface, may be of limited interest to a local community, but significant to specialists for an understanding of past human habitation. Thus, the first procedure to be followed to avoid damage to cultural heritage during the project implementation is stakeholder consultation. Stakeholders will include, as relevant:

a) Project affected parties, including individuals and communities within the country who use or have used the cultural heritage within living memory; and
b) Other interested parties, which may include national or local regulatory authorities that are entrusted with the protection of cultural heritage and nongovernmental organizations and cultural heritage experts, including national and international cultural heritage organizations.

Relevant stakeholders are identified and consulted early in project preparation, as this can help to identify cultural heritage, document its presence and significance, assess potential project impacts, and determine appropriate mitigation measures in a timely manner. The variety in types of cultural heritage may call for consultation with different stakeholders, including local and indigenous tradition bearers where appropriate, who may have different interests in, or attach different significance to, the cultural heritage.

The project will carry out meaningful consultations with stakeholders in accordance with ESS10 in order to identify cultural heritage that may be affected by the project; consider the significance of the cultural heritage affected by the project.

Documentation of consultations on cultural heritage usually includes the following:

a) The way in which stakeholders recognize and understand the cultural heritage and the values they attribute to it.
b) Any issues relating to the need for confidentiality regarding the cultural heritage, for example, location or details of traditional use of the cultural heritage and individuals involved, as appropriate.
c) Any existing or potential conflicts arising from different views regarding the cultural heritage.
d) Any views of affected parties and other interested parties regarding ways to address project-related risks to, and impacts on, the cultural heritage, including on proposed mitigation measures.

4.2 Notification

When artefacts or sites of cultural heritage are encountered by chance while undertaking excavation during construction activities, the following steps will be applied:

a) Stop all work and cordon off area and do not allow anybody access to the area.
b) Immediate report to the respective Woreda Culture and Tourism Office.
c) If appropriate, Woreda Culture and Tourism Office will report to the Regional Culture and Tourism Bureau for further analysis.

4.3 Documentation

Methods for documenting cultural heritage typically include field surveys to identify cultural heritage likely to be affected by the project. Over small areas, manual survey techniques may be appropriate, while for larger areas, various cultural heritage survey techniques and technologies (for example photogrammetry, remote sensing for cross-referencing, and comparing survey data) may be more appropriate. For intangible cultural heritage, identification typically involves consultations with tradition bearers and practitioners of certain cultural practices and documented by recording the intangible forms and collecting documents that relate to it. The application of such methods is proportionate to the risks and impacts of the project on cultural heritage.

4.4 Assessment of risks and impacts

- The social and environmental assessment will carry out a meaningful consultation with the aforesaid stakeholders, as appropriate, in accordance with ESS10. The assessment, as set out in ESS1, will consider direct, indirect, and cumulative project-specific risks and impacts on cultural heritage.
- Direct impacts, such as those caused by construction activities, are often the most readily apparent. These impacts generally result from excavation, dredging, flooding, or the vibration caused by heavy machinery. Indirect and cumulative impacts that may occur during implementation or after completion of a project may result from changing conditions of the physical environment such as pollution (air, land, soil, water) and inappropriate waste generation.
- Where necessary due to the potential risks and impacts of a project, the environmental and social assessment will involve the participation of cultural heritage experts. If the environmental and social assessment determines that the project may, at any time during the project life cycle, have significant potential risks and impacts on cultural heritage, the MoA will engage cultural heritage experts to assist in the identification, valuation assessment, and protection of cultural heritage.
- Impacts on cultural heritage that are recognized by local communities as important need to be considered even if the cultural heritage is not legally recognized or protected. This consideration is important because the cultural heritage may be designated, protected, or managed by religious, tribal, ethnic, or other community authorities, and therefore recognized in accordance with tradition and customs. In some societies, the character, location, and use of heritage sites and objects may be kept secret or known only to authorized persons.
- The environmental and social assessment also takes into consideration the significance of intangible cultural heritage that may be materially affected or put at risk as a result of the project. For example, project activities may require cutting of trees or the movement of boulders that are used for cultural or religious practices and are considered sacred. If potential risks and impacts are identified, measures and actions to avoid, mitigate, and/or manage them are put into place.

4.5 Design mitigation measures

- The implementation of the DRIVE project will avoid impacts on cultural heritage. When avoidance of impacts is not possible, the MoA will identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy.
- Based on the nature and scale of environmental and social risks to, and impacts on, cultural heritage, a Cultural Heritage Management Plan (CHMP) may need to be prepared, in consultation with relevant stakeholders. The CHMP includes measures for identifying and managing the cultural heritage, together with monitoring arrangements. An indicative outline for a CHMP is set out in *Annex A* of this document.
- Overall, mitigation measures may include relocating or modifying the physical footprint of the project; documentation; strengthening the capacity of national and sub-national institutions responsible for managing cultural heritage affected by the project; establishment of a monitoring system to track the progress and efficacy of these activities; establishment of an implementation schedule and required budget for the identified mitigation measures; and cataloging of finds.
- Mitigation measures should consider the specific characteristics of the cultural heritage being affected and the different values attributed to it by various stakeholders. In line with the mitigation

hierarchy, immovable cultural heritage is best protected in place to avoid irreparable damage from removal. If it is not feasible to avoid impacts through a change in project design, other mitigation measures are developed to address the associated risks and impacts.

- If there is any subproject that will be located within a legally protected area or a legally defined buffer zone, the mitigation measures will:
  a) Comply with local, national, regional, or international cultural heritage regulations6 and the protected area management plans.
  b) Consult the protected area sponsors and managers, project-affected parties (including individuals and communities), and other interested parties on the proposed project.
  c) Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area.

5. Indicative outlines of Cultural Heritage Management Plan

This Appendix provides an indicative outline of the elements of the Cultural Heritage Management Plan (CHMP) referred to in ESS8 and this Guidance Note. The CHMP addresses the following as relevant to the project:

- A review of the legal and institutional framework applicable to cultural heritage;
- Roles and responsibilities of the different project and other interested parties, for example, the Borrower, contractors, project-affected people, and cultural heritage authorities;
- The steps to identify and manage cultural heritage throughout the project life cycle;
- Proposed mitigation measures to be undertaken;
- Steps for incorporating relevant requirements relating to cultural heritage into project procurement documents, including chance find procedures;
- Implementation schedule and budget; and
- Monitoring and reporting requirements.

ANNEX B: FORMS AND CHECKLIST

Annex B1: Criteria for subproject screening

S/N	*Criteria*	*Field Appraisal*
1.	**A** subproject may involve, or result in: Diversion or use of surface waters. Use of energy Pollution (air, water, soil, ecosystem) Generate waste (soil or liquid) Greenhouse Gases (GHGs) emission Community health and safety risks risks of encroaching nationally projected or internationally recognized areas of high biodiversity due to project-related land acquisition	For each item, a field appraisal determines the nature and scale of the potential risks and impacts. The application may need to be revised to avoid or minimize potential adverse effects, and may require design of appropriate Environmental Management Plan as outlined and annexed in the ESMF.
2.	A subproject will involve or introduce the use of pesticides	**A** field appraisal determines the type and scale of the concerns. Accordingly, a Pest Management Plan is prepared proportional

		to the type and scale of the problem
3.	**A** subproject may involve, or result in: Diversion or use of surface waters. New or rebuilt irrigation or drainage systems. Construction small dams, weirs, reservoirs, wells, or water points.	A field appraisal determines the scale and level of potential risks and impacts. The application may need to be revised to avoid or minimize potential risks and impacts and may include design of Environmental Management Plan as set out in ESS3.
4.	A subproject may affect a protected area or a natural habitat.	• A field appraisal determines if the subproject will adequately avoid adverse effects on the protected area or natural habitat as provided for in ESS6 and this ESMF • Where the findings of the environmental and social assessment reveal significant risks and adverse impacts on forests, natural or critical habitats or protected areas of high biodiversity value, the identification of project design solutions will: a) Adopt a precautionary approach with the assumption that ecological systems are highly complex, which can make it difficult, if not impossible, to make reliable predictions concerning the longer-term impacts of the project activities. For this reason, precautionary approach depends on the adage *'absence of evidence is not evidence of absence.'* In the precautionary approach, the emphasis is on avoiding actions with potentially harmful (and particularly with irreversible) consequences until there is sufficient information available to properly assess and weigh the alternative project design solutions. b) Apply adaptive management practices that include regular monitoring of environmental and social indicators, comparing these with expected outcomes, and revising actions as needed in order to realign the implementation of the project activities with ESS objectives set in the ESMF

5.	Land must be acquired for a subproject, an individual or community's access to land or available natural resources is restricted or lost, or any individual or family is displaced.	filed appraisal determines the type of displacement (economic or physical or both) and scale of the impact. Then, decide whether a Resettlement Action Plan (RAP) is needed or not.
6.	Indigenous people may be adversely affected or could benefit from it.	A field appraisal determines the potential impacts and benefits to these people. An Indigenous Peoples Plan (UCP) may be required for avoiding negative impacts to these people and for including them in the benefits of the subproject, according to the requirements described in ESS7.
7.	A subproject may have an impact on ecologically sensitive ecosystems (e.g. wetland or marshes)	A field appraisal determines the scale and level of impacts. The application may need to be revised to describe how the subproject will avoid or minimize adverse impacts to ecologically sensitive areas. This may require a distinct Environmental Management Plan (EMP) as outlined in ESS6

Annex B2: DRIVE subproject risk categorization

I. Exclusion list of subprojects under DRIVE Project

The following types of activities are ineligible for financing under the Project:

- Activities that may cause long term, permanent and/or irreversible (e.g. loss of major natural habitat) impacts.
- Any activities involving adverse impacts on biodiversity conservation and sustainable management of living natural resources.
- Any activities that, due to the nature and scale of the activities, would result in a wide range of significant adverse impacts and risks, which are long-term, permanent, and/or irreversible, impossible to avoid entirely, and cannot be mitigated or required complex, unproven mitigation and excessive associated costs, rendering its risk classification as high.
- Production or trade in any product or activity deemed illegal under the Recipient's laws or regulations or ratified international conventions and agreements.
- Production or trade-in pesticides/herbicides subject to international phase-outs or bans.
- Activities that have a high probability of causing serious adverse effects to human health.
- Activities that may have significant adverse social impacts and/ or may give rise to significant social conflict.
- Activities that may impact on known cultural heritage sites including sites that are important to local communities.
- Any activities that have adverse impacts on cultural heritage as defined under ESS8.
- Any activities that would curtail workers' fundamental rights. These would include: (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) prohibition of child labor, including without limitation the prohibition of persons under 18 from working in hazardous conditions (which includes construction activities), persons under 18 from working at night, and that persons under 18 be found fit to work via medical examinations; (iv) elimination of discrimination in respect of employment and occupation, where discrimination is defined as any distinction, exclusion or preference based on race, color, sex, religion, political opinion, national extraction, or social origin.
- Production or activities that impinge on the lands owned, or claimed under adjudication, by indigenous peoples, without full documented consent of such peoples.
- Any other excluded activities as set out in the ESMF for the Project.

II. Subproject risk categorization

In determining the appropriate risk classification, the project will take into account relevant issues, such as the type, location, sensitivity, and scale of the subproject; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of the Borrower (including any other entity responsible for the implementation of the project) to manage the environmental and social risks and impacts of the subprojects in a manner consistent with the ESSs.

Other areas of risk may also be relevant to the delivery of environmental and social mitigation measures and outcomes, depending on the specific subproject and the context in which it is being developed. These could include legal and institutional considerations; the nature of the mitigation and technology being proposed; governance structures and legislation; and considerations relating to stability, conflict or security.

The subproject will classify the environmental and social risk into one of the three classifications:

- Substantial Risk: Subprojects which involve resettlement (unless the risks or impacts of such resettlement are minor), adverse risks or impacts on UCs or significant risks or impacts on the environment, community health and safety, labor and working conditions, biodiversity or cultural heritage, as high or substantial risk. If not under the first category, subprojects which may have major environmental impacts; thus, necessitating Environmental and Social Impact Assessments. Such subprojects require screening, preparation and implementation in accordance with the WB's ESSs, other GIIP and relevant national laws.
- Moderate Risk: Subprojects that are expected to have only moderate (in spread and severity) environmental and social risks and impacts. These impacts are mostly generic in nature and in most cases mitigation measures can be designed more readily than for subprojects in High Risk and Substantial Risk.
- Low Risk: Subprojects which are expected to have low or insignificant environmental and social risks and impacts. Hence no environmental and social impact assessment is required for such subprojects beyond screening. Such subprojects require screening, preparation and implementation in accordance with the national policies and laws.

If the risk rating of a subproject increases to a higher risk rating, the Bank will require the Borrower to apply relevant requirements of the ESSs in a manner agreed with the Bank. The measures and actions agreed will be included in the ESCP, and will be monitored by the Bank.

Annex B3: Indicative Annual Report Form

1. Name of project and application number:
2. Name of Woreda or local government:
3. Name and position review authority completing the annual report:
4. Reporting year
5. Date of report:
6. Subproject

   Please enter the numbers of the subprojects in the following table. *(Note: the numbers and types of subprojects should be the same as what is planned in the ESMPF)*

Types of activities	Approved this year	Application included (ESMF Checklist)	Number of Activities Requiring:					
			Field appraisal	PMP	RAP	UCP	CFP	Specific TA

7. Were there any **unforeseen environmental or social problems** associated with any subprojects approved and implemented this year? If so, please identify the subprojects and summarize the problem(s) and what was or will be done to solve the problem(s). Use a summary table like the one below.

Subproject	Problem(s)	Action(s) taken	Action(s) to be taken

8. Have any **other environmental or social analyses** been carried out by other public or private agencies in your district/province? If so, please describe them briefly.

   _____
   _____

9. Have you noticed any particular **problems with implementing the ESMF** in the past year (e.g. administrative, communications, forms, capacity)? If so, please describe them briefly.

   _____
   _____

10. **Training:** Please summarize the training received in your district/province in the past year as well as key areas of further training you think is needed.

Group	Training Received	Training Needed
Review Authority		
Approval Authority		
Extension Teams		
Communities		
…..etc		

Annex B4: Guideline for Annual Reviews

Objectives:

The objectives of annual reviews of ESMF implementation are two-fold:

a) to assess Project performance in complying with ESMF procedures, learn lessons, and improve future performance; and
b) to assess the occurrence of, and potential for, cumulative impacts due to Project-funded and other development activities.
c) The annual reviews are intended to be used by Project management to improve procedures and capacity for integrating natural resources and environmental social management into Project operations. They will also be a principal source of information to Bank supervision missions.

Scope of work:

ESMF Performance Assessment

The overall scope of the performance assessment work is to:

a) Assess thy adequacy of the subproject approval process and procedures based on interviews with Project participants, Project records, and the environmental and social performance of a sample of approved subprojects;
b) Assess the adequacy of ESMF roles and responsibilities, procedures, forms, information, resource materials etc.;
c) Assess the needs for further training and capacity building;
d) Identify key risks to the environmental and social sustainability of subprojects; and
e) Recommend appropriate measures for improving ESMF performance.
f) The following tasks will be typical:
g) Review central and district records of subproject preparation and approval (e.g. applications; screening checklists; ESMPs, RPs, PMPs and IPDPs; appraisal forms; approval documents), as well as related studies or reports on wider issues of natural resources and environmental management in the country.
h) On the basis of this review, conduct field visits of a sample of approved subproject to assess the completeness of planning and implementation work, the adequacy of environmental/social design, and compliance with proposed mitigation measures. The sample should be large enough to be representative and include a substantial proportion of subprojects that had (or should have had) a field appraisal according to established SMF criteria. Subprojects in sensitive natural or social environments should especially be included.
i) Interview Project and district officials responsible for subproject appraisal and approval to determine their experience with ESMF implementation, their views on the strengths and weaknesses of the ESMF process, and what should be done to improve performance. Improvements may concern, for example, the process itself, the available tools (e.g. guidelines, forms, information sheets), the extent and kind of training available, and the amount of financial resources available).
j) Develop recommendations for improving ESMF performance.

Cumulative Impacts Assessment

This part of the annual review assesses the actual or potential cumulative impacts of subprojects with other subprojects or development initiatives on the environment, natural resources and community

groups. Cumulative impacts result from a number of individual small-scale activities that, on their own, have minimal impacts, but over time and in combination generate a significant impact. For example:

- Decline in groundwater levels or quality due to pollution generate from various project activities.
- Overwhelmed or illegal waste and dumping sites due to the inappropriate disposal of increasing amounts of waste materials from project activities.
- Illegal poaching of wildlife due to expansion of land under cultivation or increased proximity and access to protected areas through construction of small access roads; and
- Attraction of large migrant populations to communities that have successfully introduced improve social infrastructure (such as schools, health centers or water sources) resulting in overcrowding, depletion of resources (e.g. space, supplies, water), etc.

The function of this assessment is primarily as an "early warning" system for potential cumulative impacts that might otherwise go undetected and unattended to. It will be largely based on the observations of people interviewed during the field work, and trends that may be noticed by district or regional officials. Where cumulative impacts are detected or suspected, recommendations will be made to address the issue, perhaps through more detailed study to clarify matters and what should or can be done about them.

Qualification for undertaking annual review:
The reviews should be undertaken by an individual or small team with training and experience relevant to the likely issues to be encountered (e.g. environmental and natural resources management, land acquisition and resettlement, indigenous peoples). They should also be familiar with the methods and practices of effective community consultation, and with typical methods and processes for preparing, appraising, approving and implementing small-scale community development projects.

Timing:
Annual reviews should be undertaken after the annual ESMF report has been prepared and before Bank supervision of the Project, at the closing of each year of the Project. It is expected that each review would require 3-4 weeks of field work (interviews, examination of subprojects), and that the review report would be completed within 2 weeks of completing the field work.

Outputs:
The principal output is an annual review report that documents the review methodology, summarizes the results, and provides practical recommendations. Distinct sections should address a) ESMF performance and b) cumulative impacts. Annexes should provide the detailed results of the field work, arid summarize the number of approved subprojects by district and their characteristics according to the annual report format (see *Annex B3*).

Copies of the annual review report should be delivered to Project management, to each district office responsible for appraisal, approval and implementation of subprojects, and to the World Bank. Project management (central or district) may also want to host national or district workshops to review and discuss the review findings and recommendations.

ANNEX C: CONTACT DETAILS OF THE STAKEHODLERS CONSULTED

Annex C1: List of the Officials and Experts Consulted (Federal to Local Level)

A. Federal Level Stakeholders

Ministry of Women and Social Affairs

- Alemu Seid, Strategic Administration Directorate Director, phone number 0947722424
- Minyamir Yitayew, Women Empowerment Team Leader, phone number 0940096401
- Zebder Bogale, Advisor of the Minister, phone number 0911820155

Ministry of Agriculture

- Fetlework Belete, Natural Resource Directorate, Senior Environmental Expertise, phone number 0921920354

Ministry of Finance

- Andinet, International Financial Institution Cooperation Directorate, Senior Economist and DRIVE Project Technical Committee Member, phone number 0933869787

Ministry of Trade and Regional Integration

- Gizaw, Advisor of the Minister, phone number 0912422129
- Desnet, Livestock Production and Market Directorate Director, phone number 0914747564
- Tamirat, Environmental Safeguards Specialist, phone number 0911373982
- Teshome, Social Safeguards Specialist, phone number 0911289563

Meat and Dairy Industry Institute

- Addisu Mesfin, Women, Children and Youth Director, phone number 0912021906
- Maru Kemal, Environmental Engineer and Researcher, phone number 0912311231

B. Regional Level Stakeholders

Oromia Region Agricultural Bureau

- Tolera Debela, Pastoral Development Sector Head, phone number 0911775059
- Ahimed Mohammed, Pastoral Development Sector Senior Veterinarian, phone number 0913119365/0911065495
- Mengistu Asrat, Pastoral Development Sector Senior Environmentalist, phone number 0911971015

Oromia Region Environmental Protection Authority

- Fikadu Legessa, Environmentalist, phone number 0913277583

SNNPPRS Agricultural Bureau

- Siefedin, Socio-economic Specialist, phone number 0934724165

SNNPPRS Trade and Market Bureau

- Anbese, Livestock Directorate Director, phone number 0926105856
- Esayas, Head of the Bureau, phone number 0919116512

Afar Region Agricultural Bureau

- Ibrahim, Head of the Bureau, phone number 0911973633
- Mohammed, Environmental Specialist

Somali Regional State Trade and Market Bureau

- Mohammed Osuman, Head of the Bureau, phone number 0915224182
- Wondesson Teferi, Trade and Market Expert, phone number 0912971855

C. Local Level Stakeholders

Minalu Bekele, Agricultural Extension Worker, Bena Tsemay Woreda (SNNPRS), phone number 0986095416

Wogene Alebachew, Agricultural Extension Worker, Adola Woreda (Oromia Region), phone number 0978871577.

Annex C2: Attendance Sheet and Sample Pictures of Community Consultations

Community Consultation in Bena Tsemay Woreda Mokach Kebele

Drive Project Environmental and Social management(ESMF) Stakeholder Community Consultation participant attendance

Zone:- South Omo Jinka

Woreda : Bena Tsemay

Kebelle ;- Mokach

No	Name of participant	organization	Position	phone	Email	Signature
1	Ato Desta Delka		elders	0916695327	-	
2	w/ro Nuo Gobay		household		-	
3	w/ro Roman dawit		"	092834b772	-	
4	w/ro Abebach Alembo		"	0979872386	-	
5	w/ro Aberash bank		"	0994159582	-	
6	w/ro Azebe Demesa		DA	0977749001	-	
7	w/ro Emenat belachew		household	0965501163	-	
8	w/ro Workenesh Sisay		"	0900987813	-	
10	w/ro Kefa kebeda		"	0925707545	-	
11	Ato Menaso Yorsa		elders		.	
12	Ato Banko Anea			0968451872	-	
13	Ato Shalo Alea			0955980462	-	
14	Ato Mayaba Aska			0994305942	-	
15	Ato Dolba ento		elders	0939802855	.	
16	w/ro Mesho Baab		household	-	-	
17	w/ro Astere Yoyo		women	-	-	
18	w/ro Amarech Aika				.	
19	Ato Derga Ento			0934762083	.	
20	Ato Mokenen Sofa			0926104754	-	
21	w/ro Marta Aito		women	0921253784	-	
22	Ato Banto Bake		Ledders	0944593305	.	
23	Ato Tuyega Ashenaf		household	-	-	
24	Ato Buzayu Aftanu		Ledders	-	-	
25	W/ro Aselfche demesa		Ledders	-	.	
26	Ato Mokenen Sofay		"	-	.	

Community Consultation in Borena Zone Harakalo Woreda Germedu Sirba Kebele