



PEACE, PROSPERITY AND
REGIONAL INTEGRATION

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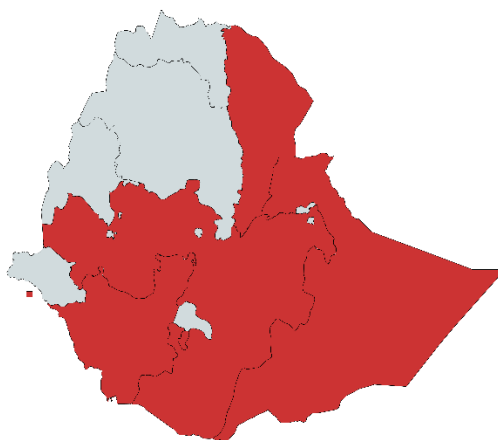
THE IGAD DROUGHT DISASTER RESILIENCE AND SUSTAINABILITY INITIATIVE (IDDRSI)

Program to Build Resilience for Food and Nutrition Security in the
Horn of Africa (HoA) Region



ETHIOPIA

Environmental and Social Management Framework / ESMF/



Consultant : Experts and Consultants United (ECU)

Client: Intergovernmental Authority for Development (IGAD)

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Addis Ababa, Ethiopia



CANADA

IN JV WITH



l'ingénieur de l'Afrique

**Groupe Africain d'Ingénierie
Conseils SA « GAIC SA »**

SENEGAL

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List of Acronym

ADB	Africa Development Bank
ADBG	African Development Bank Group
ARPP	Arero Range Pilot Project
ASAL	Arid And Semi-Arid Lands
AU	African Union
CFTA	Continental Free Trade Area
CSA	Central Statistical Agency
CSA	Climate Smart Agriculture
CSP	Country Strategy Paper
DP	development programs
DRSLP	Drought Resilience and Sustainable Livelihoods Program
EA RISP	Eastern Africa Regional Integration Strategy Paper
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment Report
ESMP	Environmental and Social Management Plan
FDRE	Federal Democratic Republic of Ethiopia
FTC	Farmers Training Center
GDP	Gross Domestic Product
GoE	Government of Ethiopia
GTP	Growth and Transformation Plan
HoA	Horn of Africa
IDDRSI	IGAD Drought Disaster Resilience and Sustainability Initiative
IGAD	Intergovernmental Authority for Development
INDC	Intended Nationally Determined Contribution
ISS	Integrated Safeguards System
MEAL	Monitoring, Evaluation and Learning
MoP	Ministry of Peace
NGO	Non-Governmental Organization
NSSP	National Social Protection Policy
OS	Operational Safeguards
PAP	pastoral and agro pastoral
PASDEP	Accelerated and Sustained Development to End Poverty
PCDP	pastoral community development projects
PIA	priority intervention areas
PPCI	Priority program to catalyse climate investments in the Sahel
PRSP	Poverty Reduction Strategy Paper
PSNP	Productive Safety Net Program
PTC	Pastoralist Training Center
PWDS	people with disabilities
REPA	Regional environmental protection agency
RMC	regional member countries'
RUSACCOs	Rural Saving and Credit Cooperatives
SDG	Sustainable Development Goals
SDPRP	the Sustainable Development and Poverty Reduction Program
SESA	Strategic Environmental And Social Assessment
SLDP	Second Livestock Development Project
SNNP	Southern Nations, Nationalities, and Peoples' Region
TFTA	Tripartite Free Trade Area
TLDP	Third Livestock Development Project
TVET	Technical and Vocational Education and Training
TYS	Tee Year Strategy

1. Introduction

1.1. Backgrounds and Contexts

HoA ASALs faced with worsened impacts of drought and increased poverty, food insecurity and other livelihood vulnerabilities. The HoA ASALs region have become synonymous with human emergencies, economic hardships, sufferings and catastrophes as the affected countries and international community struggled to respond to drought emergencies with relief aid and humanitarian interventions. Only about 5% of the original ecosystems and habitats remain intact in the IGAD region. This implies that approximately 95% of the original ecosystems have been converted to other land-use forms, severely or moderately degraded by different drivers of degradation. Such major drivers of environmental and natural resources degradation include climate change, frequent drought, high population growth, overgrazing, forest degradation, soil and land erosion, wildlife poaching and trafficking, desertification, etc. The impact of these drivers is the reduction of the capability of the different ecosystems to provide the necessary goods and services essential for the survival of biological life in the region.

The HOA region is characterized by high climate variability. The prevailing climate changes have resulted into droughts, erratic floods and untimely rainfall patterns and these changes have significant impacts on water resources, food security, natural resource management, human health, settlements and infrastructure. Prolonged and widespread drought is a recurrent feature that is exacerbated by climate change phenomena, advancing desertification and ecological degradation.

HoA region predicted to have increased drought conditions, especially in the pastoralist regions which constitute approximately 70% of the HoA, these will intensify pressure on grazing and water resources, thereby inflicting modifications to the nature of intra-pastoralist conflicts. Such modifications could lead to erosion of traditional modes of conflicts, constituting unprecedented conditions likely to alter the equilibrium in such communities with consequent impacts on the management of pastoral resources.

The predominant livelihood system, especially in the ASALs of the HOA, is pastoral and agro-pastoral production. The pastoralists are constantly on the move, within and outside their national boundaries, in search of pasture and freshwater resources, often resulting into conflicts, which frequently necessitate regional intervention to resolve or prevent. Some other factors that worsen the vulnerability to drought risk include high dependency on climate sensitive livelihoods, fragile and rapidly degrading physical environment, inadequate extension services and high incidences of conflicts that are rampant in the region.

The countries in the HOA have identified following response strategies/programs to cope with drought. As a result of the negative impact of drought on the lives and livelihoods of several million people and the resulting suffering and loss of human and animal life, the heads of State of IGAD member countries met at a summit in Nairobi on September 8-9, 2011. At the summit, they developed the Nairobi Declaration, committing significant new investments in dry lands to end drought-related emergencies. At the end of the Summit, an agreement was reached to develop the regional strategic framework for disaster resilience and sustainability in the Horn of Africa. The aim was to reduce the impact of disasters in the region taking into account the frameworks and existing action programs, and allocate a significant share

of national revenues to finance the initiative. In support and solidarity with the preceding decision, the African Development Bank (AfDB) decided to finance part of the initiative in stages, and in a number of countries within the framework of the Multinational Drought Resilience and Sustainable Livelihoods Program (DRSLP).

The Multinational Drought Resilience and Sustainable Livelihoods Program (DRSLP) in the Horn of Africa were designed to be implemented in three phases of five years each. The purpose of DRSLP program was to contribute to poverty reduction, food security and accelerated sustainable economic growth in the HoA through enhanced rural incomes. The DRSLP-1 will be completed in 2020. This follow-up Program "Program to Build Resilience for Food and Nutrition Security in the Horn of Africa" will therefore be regarded as the 2nd Phase of DRSLP (DRSLP-II) and rank as the first program of the PPCI-Sahel 2020-2025 in the Horn of Africa. This HoA Program for Building Resilience for Food and Nutrition Security in the Horn of Africa follows the decision of the African Development Bank at the February 2019 roundtable on financing the Climate Investment Plan for the Sahel region (PIC-RS 2018 -2030). HoA Program is classified as Category Two project and this is the HoA Environmental and Social Management Frameworks.

1.2. ESMF Purpose, Scope, Objective and Methodology

Purpose

This ESMF is prepared for Ethiopia HoA program that are planned to finance multiple, community driven, small-scale subprojects whose location, scope and design are not well known at the time the Bank appraises and approves the operation. So that it serves as a framework for environmental and social assessment and other safeguard measures to be established during Ethiopia HoA program implementation. The ESMF document establishes procedural process to address all environmental and social safeguard issues for subprojects from preparation, through appraisal and approval, to implementation. The ESMF assist to avoid or minimize environmental and social risks of Category II subprojects funded by the HoA program.

ESMF Scopes and Objectives

This ESMF guides the program implementers to make sure sub-projects financed by the program are remained in Category II based on their environmental and social impacts. So, the ESMF used for HoA programs small-scale subprojects identified for having anticipated environmental and social risks. These risks are expected to be addressed satisfactorily through available mitigation and management measures implemented at the community level with necessary PIU support. Where subprojects have environmental or social issues that cannot be addressed accordingly, the ESMF provide for additional project-funded technical assistance to prepare more detailed plans to be implemented at the subproject level such as an ESIA / ESMP. In overall implementation of the HoA program coordinator should closely work and consult with environmental and social expert of the program to ensure that the proposed subprojects will remain category II small scale activity and therefore manageable under the ESMF.

ESMF objectives

- 1) Establishing clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of subprojects to be financed under the HoA program,
- 2) Identification of specific roles and responsibilities, and outlining the necessary reporting procedures for managing and monitoring environmental and social risks related to subprojects,
- 3) Determining the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF,
- 4) Establishing project funding required to implement the ESMF requirements and
- 5) Providing lessons learned for application to future programs.

Methodology

The following methodological approaches were using to prepare the ESMF:

Desk Review

Desk review done on relevant national and international policies, laws, proclamations, strategies, guidelines/manuals, related programs and Safeguard practice lesson learned from previous projects in similar context with the HoA program. The reviewed laws and policies related to Environmental and Social Issues, land acquisition and compensation, biodiversity conservation, water resource management, resilience of drought and climate change.

Field Visits

Field visits was made in the HoA program implementing regions: Afar, Somali, Oromia, and Southern Nations Nationalities (SNNP) to undertaken key informant interviews and field observations regarding environmental and social context of the regional and 8 woredas in the four regions.

Field visit was conducted in previous DRSLP sites were infrastructure sub-projects implemented to draw best practice and lessons. Moreover, meetings were held with regional and woreda sector heads, vice bureau heads, sector technical experts and regional program implementation unit's team. During the visit, relevant information's that are used to prepare the ESMF was collected these include: physical physiography and topography of area, land use, socio-economic status of the communities etc.

Stakeholder Consultation

Serious of consultation was made with country level offices, IGAD and AfDB through the definition of project components, feasibility studies and in the preparation of this ESMF documents for Ethiopia HoA program. Conversations have been made with the ground level program implementers at region and woreda (district) with regard to environmental protection and social safeguard issues during filed missions.

The field visit to the 4 regions and 8 woredas in 4 IGAD Clusters was done in period: 5th July - 14th July 2021 here discussion was made with regional and woreda offices and stakeholders for the program and safeguards oversee institutions. Moreover, the team made also a visit to some infrastructures developed by the previous project (DRSLP II). ESMF report further developed with receiving feedback from the

federal validation workshops, IGAD and AfDB program missions made via zoom meetings and physical discussion.

The national validation workshop done in July 28/2021, Addis Ababa, Ethiopia with stakeholders came from different line ministries, regional stakeholders, other relevant public projects, IGAD and NGO's. The appraisal mission program by AfDB on program to build resilience for food and nutrition security in the horn of Africa, Ethiopia component made on 17 to 20 August 2021 created additional improvement on ESMF to keep the land with the Bank requirements and format.

2. Description of Program

The HoA Program builds on previous and ongoing AfDB programs, with a regional approach, such as the 'Drought Resilience and Sustainable Livelihoods Program – DRSLP', which are being undertaken within the framework of the 'Drought Disaster Resilience and Sustainability Initiative – IDDRSI'.

The overall objective of the HOA program as defined by the AfDB project identification mission of June 2019 is to contribute to improving the living conditions of the populations and food and nutritional security in the Horn of Africa. HoA program aims to: Increase, on a sustainable and resilient basis, the productivity and agro-sylvo-pastoral production in the Horn of Africa; Increase income including accessing funds and technology to promote value addition for agro-sylvo-pastoral and fisheries value chains, and; Strengthen the capacity of populations to better adapt to the risks of climate change.

HoA Program interventions based on principles of: (a) Concentrating interventions in a limited number of vulnerable municipalities /districts (or equivalents), (b) Focusing the program on structuring agro-sylvo-pastoral investments, (c) Promoting community-managed infrastructure, (d) Priority to cross border clusters, (e) Contiguity of intervention districts (or equivalents), to facilitate program implementation and supervision, (f) Developing synergies with ongoing actions in the region and in each country and (g) Alignment with country policies and strategies. Generally, priority will be given to consolidating the resilience of the intervention districts (or equivalents) of past interventions.

HoA program aim was to support implementation of the 'Priority Program to Catalyze Climate Investments in the Sahel (PPCI 2020-2025)'. Sahel zones face recurrent droughts and unpredictable rainfall patterns, characteristic of arid and semi-arid lands (ASALs). In the Eastern Sahel, ASALs receives less than 600 mm of annual rainfall and comprise more than 70% of the Horn of Africa (HoA). The region includes the eight member countries of IGAD (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda), which cover an area of 5.2 million km², have a population of more than 250 million people and are endowed with a considerable range of natural resources.

2.1. HoA Program Justification and Program Components

The HoA Program builds directly on the DRSLP, which has been operational since 2013. The regional component of the HoA Program overlays the ending DRSLP initiative while its national components will be implemented directly by the relevant Government Ministerial Departments in IGAD countries.

The activities of DRSLP-I in Ethiopia until the end of 2020 are detailed below and the DRSLP-II plan has been developed based on this.

Table 1: DRSLP-I major infrastructure development and other interventions done in the DRSLP project area

Activities	Unit	Retinol achievement				Total
		Afar	Soma li	Oromia	SNNP	
1. Feasibility study design& bid Document large water schemes	No					
Borehole & shallow well		13	24	20	15	72
Small Dam		2		1	3	6
Micro Dam		2	2	1	2	7
Diversion / Pump from river		2	3	6	8	19
Pond/Cistern		38	53			91
2. Drilling of large water infrastructure	No	11	20	96	84	
3. Rehabilitation of Civil & Electro Mechanical Works for the drilled water wells by DRSLP and Other Project		17	22	1	74	114
4. Rangeland Management and Fodder production & forage seed production activities						
Bush Clearing & Invasive weed control	Ha	912	440	14,613	2,646	1,352
Construction of Pastoral Training Centers (PTC)	No	9	12			21
Rangeland Area Closer with supportive physical & Biological soil & water conservation	Ha	1,426	814			2,240
Rangeland Area closer	Ha			6,162	2,121	8,283
Rangeland - Soil bund, Stone bund, Check dam	Km			1,075	655	1,730
Fodder & Forage seed production	Ha	186	232			418
Community Fodder Seed Multiplication and Fodder development	Ha	69	215			284
Construction of hay store/emergency fodder storage	No	2	4			6
Prescribed fire	Ha			575		575
Post management rangeland	Ha			7,199	427	7,626
Reseeding & Replanting	Ha			891	290	1,181
5. Livestock market infrastructures and animal health infrastructures						
Feeder road Construction	Km	11.6	56	45	22.5	135.1
Construction and furnishing of new livestock market center	No	7	3	8	7	25
Rehabilitation & furnishing of existing Livestock Market Centers	No	1	2	1		4
Construction and furnishing of Permanent Vet Clinics (PVC)	No	1	2			3
Construction and furnishing of Animal health posts (AHP)	No	6	18			24
Supply of laboratory furniture for Afar - Mille quarantine station	No	1				1
Supply of office materials and equipment for Mille	Set					

Quarantine Center		1				1
Equipping Afar Regional Laboratory	No	1				1
Supply of laboratory Reagents and Diagnostic Kits for National Animal Health Diagnostic & Investigation Center	No National					
Supply of vehicle to establish mobile vet. clinic	No	1	3			4
Forage Seed Bank	Kg			1091	250	1341
Fodder Produced	Bell			91,717	154,754	246471
Rehabilitation of Veterinary Laboratory					1	1
6. Cooperatives Organized by DRSLP – Number of Cooperative, Beneficiary and Seed Money						
Livestock trade cooperatives – 266 in Four Region with 4932 members and 43.6 million seed money						266
Beekeeping			2			2
Crop Production			2			2
Gum and incense			1			1
Milk collection and marketing			1			1
Petty trade			1			1
Fodder production		2				2
Consumer – 607 members		26				26
Recreation service		4				4

Source 2020 DRSLP Report (Completed Up to the end of 2020).

The overall objective of the HOA program is to contribute to improving the living conditions of the populations and food and nutritional security in the Horn of Africa.

Specifically, the HoA program aims to:

- Increase, on a sustainable and resilient basis, the productivity and agro-sylvo-pastoral production in the Horn of Africa
- Increase income including accessing funds and technology to promote value addition for agro-sylvo-pastoral and fisheries value chains, and;
- Strengthen the capacity of populations to better adapt to the risks of climate change.

HoA Program Components

The HoA program has four major components and 9 sub-components. Each sub-component includes list of proposed sub-projects with proposed activities to be implemented to the end of achieving the HoA program.

Component (1)- Strengthening the resilience of drought prone areas and pastoral and agro-sylvo-pastoral production systems to Climate Change, (Sub-component 1, Sustainable agricultural land management and sustainable management of pastoral lands, Sub-component 2, Agricultural Infrastructure - adapting farming systems to climate change, pastoral infrastructures and economic diversification; Sub-component 3, Promotion and diffusion / vulgarization of Climate Smart Agriculture technologies, Knowledge management and technology transfer and Improved nutritional status of households).

Component (2): Supporting agro-business development (sub-component 1, access to advisory services, financing and markets; sub-component 2, supporting development of entrepreneurship; and sub-component 3, promoting domestic bio-digesters and solar energy).

Component (3)- Strengthening Adaptive capacity to Climate Change (Sub-component 1, Development of Climate Services, Sub-component 2, Building capacity of main stakeholders in the agro-pastoral sectors in the drought prone areas for mainstreaming and monitoring Climate Change and Sub-component 3, strengthening the Operational Capacity for resilience).

Component (4) - Program coordination and management, this component will ensure the effective and efficient regional management of the program by the IGAD/ IDDRSI Platform Coordination Unit (PCU). It also includes management of national components at national and sub-national levels to achieve the expected outcomes of the Program. It includes the implementation of regional and national coordination of the Program, technical and financial management, supervision of activities, monitoring and evaluation and annual audits.

Preliminary Impact screening has done during the Environmental and social assessment for all proposed activities to identify anticipated types of subprojects who have potential adverse environmental and social risks so that should be included in the ESMF of HoA implementation using the Bank guidance tools as part of development of integrated safeguard system 2013 AfDB and Ethiopian environmental impact assessment guideline document 2000 and environmental impact assessment procedural guideline series-1, 2003. The matrix consists of a list of resources/receptors that could be affected by the project activities, set against a list of project activities. Entries in the matrix cells can then be coloured to indicate whether:

- An interaction is not reasonably expected (e.g. white).
- An interaction is reasonably possible but none of the resulting impacts are likely to lead to significant effects (e.g. grey).
- The interaction is reasonably possible and at least one of the resulting impacts is likely to lead to an effect that is significant (e.g. black).

Those interactions that are coloured white are 'scoped out' of further consideration in the process. Those interactions that are coloured grey are also 'scoped out', but a discussion that includes the evidence base (e.g. past experience, documented data, et.) should be provided to justify the basis upon which this decision was made. Those interactions that are coloured black are retained for further consideration.

Table 2: Screening **matrix** guidance materials regarding **environmental** and **social** assessment

Project Phases and Activities	Environmental Resources										Social Resources										
	Geology	Soil	Surface Water	Fisheries	Vegetation	Wildlife	Air Quality	Noise and Vibration	Acoustics	Sediments	Demographics (including physical displacement)	Economy and livelihood	Social cultural structures	Land use including economic displacement	Infrastructure and	Cultural resources	Transportation	Health	Impact on vulnerable	Education and skills	Category /AfDB/
Component 1. Strengthening the resilience of drought prone areas and pastoral and agro-sylvo-pastoral production systems to climate change. Sub-Component: Support for sustainable management of agro-pastoral land																					
Multipurpose water supply/distribution system from bore holes Ponds (xx m3), Spring development, including distribution network, Birkas (underground tanks/subsurface dams), Hand-dug wells, Rehabilitation of existing water infrastructure and Small scale irrigation for crops and fodder production (bulk irrigation water & distribution network).																					2
Assuring sustainable year-round livestock feed access																					2
Strengthen the animal health service to the extent that provides efficient and effective service to the pastoral community																					3
Promote and capacitate agro-pastoralist to implement improved forage development strategies																					3
Rangeland management																					3
Integrate area closure with physical SWC structures																					3
Conservation Agriculture (CA)/Minimum tillage																					3
Integrated Soil Fertility Management																					3
Improving access for smallholder irrigation																					3
Agro-silvo-pastoral system																					3
Capacity building																					3
Promote Sustainable Management of agricultural land																					3
Provide support for sustainable pastoral land management																					3
Component 1. Strengthening the resilience of drought prone areas and pastoral and agro-sylvo-pastoral production systems to climate change Sub-Component: 1.2.Development of climate resilient infrastructure																					
Bush thinning and clearing in noxious bush encroached areas of communal rangelands																					3
Livelihood and income diversification for Women, Men and Youth																					3
Support Economic Diversification for women																					3
Component 1. Strengthening the resilience of drought prone areas and pastoral and agro-sylvo-pastoral production systems to																					

Project Phases and Activities	Environmental Resources										Social Resources										Category /AfDB/
	Geology	Soil	Surface Water	Fisheries	Vegetation	Wildlife	Air Quality	Noise and Vibration	Acoustics	Sediments	Demographics (including physical displacement)	Economy and livelihood	Social cultural structures	Land use including economic displacement	Infrastructure and	Cultural resources	Transportation	Health	Impact on vulnerable	Education and skills	
climate change																					
Sub-Component: 1.3. Promotion of climate-smart innovations and technologies																					
Introduction of climate smart agriculture technologies																					3
Component 2. Supporting agribusiness development , Sub-Component: 2.1.Access to advisory services, financing and markets																					
Create market linkage and integration for women																					3
Facilitating low interest finance or seed money for small and medium enterprises																					3
Establish integrated rural Input Centers and advisory services / incubation agro entrepreneurship Centers																					2
Promotion and facilitating market linkage																					2
Encouragement of PPP investments in feedlots for off-take, export slaughterhouses and tanneries and leather development facilities																					3
Strengthening of Livestock & related products Market Information Systems (LMIS) including; electronically facilitated trade, digitalization of commodity and livestock trade																					3
Component 2. Supporting agribusiness development , Sub-Component: 2.2 Supporting development of entrepreneurship																					
Boosting and capacitating livestock marketing																					3
Construction and equipping of small processing and marketing units for agricultural and dairy products																					2
Support the establishment of food reserve systems for better future prices and as a means of enhancing resilience																					3
Component 2. Supporting agribusiness development , Sub-Component:2.3. Promoting domestic bio-digesters and solar energy																					
Component 3. Strengthening adaptive capacity to climate change Sub-component: 3.1. Development of climate services																					
Provision of climate advisory support through digital agriculture																					3
Component 3. Strengthening adaptive capacity to climate change Sub-component: 3.2. Building capacity of main stakeholders in the agro-pastoral sectors in the drought prone areas for mainstreaming and monitoring climate change																					
Knowledge management and learning																					3
Component 3. Strengthening adaptive capacity to climate change Sub-component: 3.3. Strengthening the operational capacity for resilience																					
Enhance rural community's operational capacity improving access through feeder roads																					2
Component 4. Program coordination and management																					
Effective and efficient regional management and																					3

Project Phases and Activities	Environmental Resources										Social Resources										Category /AfDB/
	Geology	Soil	Surface Water	Fisheries	Vegetation	Wildlife	Air Quality	Noise and Vibration	Acoustics	Sediments	Demographics (including physical displacement)	Economy and livelihood	Social cultural structures	Land use including economic displacement	Infrastructure and	Cultural resources	Transportation	Health	Impact on vulnerable	Education and skills	
coordination of the HoA Program by IGAD																					
Effective and efficient management and coordination of the HoA Program by IGAD member states																					3

Adapted from; Development of guidance materials regarding Environmental and social assessment as part of development of integrated safeguard system 2013 AfDB.

2.2. HoA Subproject managed in the ESMF

Identified anticipated subprojects are selected to be financed by the Ethiopia HoA program that have potential adverse environmental and social impacts and classified as Category II sub-projects. The following listed sub-projects in the table will be covered in framework of ESMP of sub-projects to guide PIU and sub-project implementation by providing how future subprojects' ESAs, once the locations/sites are known, will be identified, prepared, cleared, approved, disclosed, integrated in bidding process and monitored including the cost estimates.

Table 3: Horn Program-Ethiopia - Proposed infrastructures

Horn Program-Ethiopia - Proposed infrastructures					
No	Type	Unit	Quantity	unit cost USD	Total Costs M USD
1	Sub-component 1.1 Water Mobilization infrastructures				
1.1	Large scale water infrastructures				
	Multipurpose water supply/distribution system from bore holes (this sub-project are provided with already made 4 ESIA per four region – Afar, Somali, Oromia and SNNP) by Ethiopia DRSLP PIU	No	29	448,275.86	13,000,000
1.2	Small-scale water infrastructures				-
1.2.1	Ponds (xx m3) include aquaculture	No	30	50,000.00	1,500,000.00
1.2.2	Spring development, including distribution network	No	12	6,000.00	72,000.00
1.2.3	Birkas (underground tanks/subsurface dams)	No	20	33,000.00	660,000.00
1.2.4	Hand-dug wells	No	7	5,000.00	35,000.00

1.2.5	Rehabilitation of existing water infrastructure	No	82	10,000.00	820,000.00
1.2.6	Small scale irrigation for crops and fodder production (including fodder storage/fodder bank) - (aveg 25ha) - <i>(bulk irrigation water & distribution network)</i>	Ha	400	5,000.00	2,000,000.00
2	Sub-comp 1.1.2: Livestock Health Infrastructures				
2.1	Animal Health Posts	No	15	50,000	750,000.00
2.2	Other Livestock Infrastructure (pastoralist training center PTC/advisory service provider center, vet clinic or storage facility)	No	8	125,000	1,000,000.00
3	Sub-Comp 1.2.1 Sustainable Land Management				
3.1	Bush clearing (including invasive species), Area closure, Soil and water conservation activities (Land restoration)/mech. & biological, Re-seeding/rangeland management (community contribution)	Ha	400	10,500	4,200,000.00
4	Sub-comp 2.1. Facilitating access to market				
4.1	Construction of Access roads	No	60	31,000	1,860,000.00
4.2	Construction of livestock Market Center	No	8	111,000	888,000.00
4.3	Forage Market Centers	No	30	30,000	900,000.00
5	Sub-comp 2.2: Support to Entrepreneurship				-
5.1	Construction of community-level processing unit (demand-driven - Milk Collection Centers etc.) for Youth and Women	No	20	20,000.00	400,000.00
	Sub total cost of infrastructures covered by this ESMF				15,085,000
	Total Infrastructure sub project costs				28,085,000

Table 4: Construction Phase Anticipated Impacts checklist

No	Sub- project activities	Impact Significance*		
		Low	Medium	High
1	No. of water infrastructures		✓	
	(a) New construct:		✓	
1.1	Boreholes (deep wells)		✓	
1.2	Hand Dug wells		✓	

1.3	Shallow wells supported by Rope		✓	
1.4	Ponds (20,000 m ³ capacity)		✓	
1.5	Birkas (underground water reservoir) in Somali region		✓	
1.6	Earth Dams (Capacity& surface area)		✓	
	(b) Rehabilitation		✓	
1.1	Boreholes (deep wells)		✓	
1.2	Hand dug wells		✓	
1.3	Shallow wells supported by Rope		✓	
1.4	Ponds		✓	
1.5	Birkas (underground water reservoir) in Somali region (Capacity& surface area)		✓	
1.6	Earth Dams			
2	Veterinary services		✓	
2.1	Development of comprehensive Animal Health Services (Veterinary clinic (works) with full equipment and drug for one year)		✓	
2.2	Mobile veterinary clinic vehicles with full equipment and supported by solar energy		✓	
2.3	Mobile veterinary clinic and transported by animals and have temporary tent and supported solar energy		✓	
3	Feeder Roads			
3.1	Gravel feeder roads		✓	

2.3. Types of Subproject to be excluded from Financing

HoA Program are designed as Category II project and the ESMF serves as guideline to sub-projects to be selected and approved remain as Category II, So Sup-projects who have the following anticipated impacts classified as Category I per AfDB or Schedule I Per Ethiopian EIA guideline will not be financed by the HoA program.

Category 1 projects per AfDB ISS

- Category one projects are likely to induce significant and/or irreversible adverse environmental and/or social impacts, or to significantly affect environmental or social components that the Bank or the borrowing country considers sensitive. Some program-based operations or other regional and sector program loans that have significant adverse environmental or social risks.

Schedule1. Projects per Ethiopian EIA guideline

- Construction of dams, impounding reservoirs with a surface area of 100 hectares
- Ground water development for supply of greater than 4000 m³/day
- Large scale Land reclamation / Projects necessitating the resettlement of 100 families or more
- Development of agriculture covering an area of 500 hectares that involves change in land use
- Use of new pesticide or fertilizer didn't recognized by the concerned government body

- large scale Agricultural mechanization
- Introduction of new breed, species of crops, seeds or animals
- manmade lakes and artificial enlargement of lakes with surface area of 250 hectares or more
- Surface water fed irrigation projects covering more than 100 hectares
- Ground water fed irrigation projects more than 100 hectares
- River diversions and water transfers between catchment
- Drainage area of Forestry wetlands or wildlife habitat covering an area of 10 hectares or more
- Large-scale open range rearing of livestock in Urban area
- Large scale slaughter house construction
- Large scale commercial fisheries farm
- Introduction of exotic fish species

2.4. Project Coordination and Implementation Arrangements

As per the Project Implementation Manual (PIM) provide guidance to project management and implementation principles for implementers and partners. DRSLP-project coordination will play a leading role in ensuring the proper implementation of the ESMF. The implementation of ESMF will take place and it is also designed to render assistance to all stakeholders through the existing government structures from the federal to the Kebele level institutions.

At Federal level the main organization responsible for implementation of this ESMF at federal level is the Ministry of Agriculture (MoA). The MoA, through the DRSLP-CU, will play a leading role in ensuring the proper implementation of the ESMF. It will ensure that the applicable GoE rules and regulations as well as AfDB Safeguard Policies and Procedures are enforced.

At regional level, DRSLP Regional coordination Unit (RCU) under the concerned Bureau is established to follow up the management as well as day-to-day implementation of the program for matters pertaining to the regions. The Environmental and Social safeguard specialists within the coordination unit are responsible for following up the implementation of the ESMF. Similar to the federal level, Regional DRSLP-CU steering committee (RSC) and technical committee (RTC) have been established at regional level with the same function as that of the federal level indicated above but for matters pertaining to the regions. At regional level, DRSLP Regional coordination Unit (RCU) under the concerned Bureau is established to follow up the management as well as day-to-day implementation of the program for matters pertaining to the regions.

The BoP, through the DRSLP-RCU, plays a leading role in ensuring the proper implementation of the ESMF at regional level. It ensures that the applicable GoE rules and regulations as well as the Bank Safeguard Policies and Procedures are enforced. At regional level, Environmental Protection Authority (REPA) is responsible for ensuring the implementation of ESMF through review and approval of safeguard instruments, (especially ESIA), and to conduct environmental and social audit to ensure effective implementation of the ESMF.

At woreda level, DRSLP woreda Steering Committee (WSC) comprising of relevant offices is established to review and approve annual work plans and budgets, review implementation reports and ensure multi-sectoral coordination. DRSLP Woreda Technical Committee (WTC) is also formed to give technical backstopping and supervision of the implementation of the program activities. The overall responsibility for supervision of the implementation of the ESMF will be that of office of implementing agencies IA. To this end, the DRSLP Regional coordination Unit (RCU) will allocate budget for beneficiary Woreda so that

they could carry out ESMF implementation and compliance monitoring. Each beneficiary woreda will assign /delegate qualified safeguards specialists who will be overseeing the implementation of the ESMF. They are also responsible for monitoring and follow up, during ESMF implementation and prepare the documents and file it properly and report it to the region.

At Kebele and sub-Kebele levels are responsible to follow up and supervise implementation of the ESMF. The safeguards specialists to be delegated or assigned by each beneficiary Woreda will assist in ES screening subprojects as well as in preparation of safeguards tools for subprojects whose risks are not high. The Kebele level Natural Resources Management Development Agent (DA) has the responsibility to ensure the implementation of the ESMF.

2.5. Annual Reporting and Performance Review.

The Regional Project coordination units should prepare generic annual ES/management plan and submit it to FPCU. Accordingly, the Regional Project Coordination Units (RPCUs) are normally required to report monthly, quarterly and annually on the performance of safeguards management integrated with the subproject activities. These reports should capture the experience with implementation of the ESMF procedures.

Local authorities are normally required to report monthly, quarterly and annually on their subproject activities during the preceding months, quarter and year, respectively. These quarter and annual reports should capture the experience with implementation of the ESMF procedures.

At Woreda level, month, quarter and annual uniform tabular report format proposed to be filled at Woreda level and completed by Woreda appraisal team/MST and will be sent to regional EPFCCAs for compilation. Regional EPFCCAs will compile and send quarter and annual ESMF implementation report to the DRSLP-FPCU. Safeguard specialist at federal PCU will compile regional ESMF report and will send to the AfDB Bank for review and documentation.

The purpose of these reports is to provide:

- A record of experience and issues running from quarter-to-quarter/year-to-year throughout the subproject that can be used for identifying difficulties and improving performance; and
- Practical information for undertaking an annual review Quarterly and annual reports should be prepared at Woreda, regional and federal levels. Forms proposed to be filled by Woreda Appraisal Team/MST, regional EPFCCAs and federal safeguards specialist is attached in this ESMF

3. Environmental and Social Baseline and Context

3.1 Project Area Description

3.1.1 General Ethiopia Context

Climate:

Ethiopia covers an area of 1,104,300 km² with climatic diversity ranging from equatorial rainforest in the south, to the desert-like conditions in Somali and the Danakil Depression in the Afar Region. Generally, the physical environment of Ethiopia is mostly dissected by large rivers such as the Baro, Awash, Wabe-Shebelle, Omo-Gibe and Genale-Dawa. Rainfall is erratic and mean annual rainfall is generally less than

900mm and annual mean temperatures are above 25°C and these areas are most of the project area are arid and semi-arid and mostly faced with recurrent drought.

Soil and Geology:

The main geologic unit of one of the Afar region for example, includes volcanic rocks of the Afar Group and sedimentary of the quaternary age. Outcrops of the Afar group which are dominantly basaltic are found exposed in many areas of the region. Sand, silt, clay and reef limestone of Holocene age cover larger part of the region. Whereas the geologic formation of the Somali, Oromia and SNNPR are dominated by alternating limestone, shale, anhydrite, dolomites and marble. Soil types in the later regions are sandy and often coated with reddish soil and calcareous crust typical of desert area. Minerals like edible salt, gold and natural gas also occur in most of the regions and gum and incense also have high potential. The soils found in the project areas can be classified into alluvial, yermosols, xerosols, and other saline soils that cover desert areas of the Eastern lowlands (Kebri Dahr and Gode). Soil characteristics in Afar region is characterized as lithosols, which is mainly found in the Denakil depression.

Water Resources:

The project area has surface and ground water resources. The resource is mainly characterized with long range and Trans boundary Rivers. Large areas of the regions are drained by many major rivers. Rivers that cross the project regions include, Awash in Afar and Oromia, Genale dawa, Wabi Shebele in Somali.

Regional land size and extent of degradation

Table 5: Ethiopia - Land Degradation Neutrality National Report.

Region /City Administration	Total land size (ha)	Degraded area(ha)
Addis Ababa	52,700.00	386.06
Afar	7,205,300.00	1,382,293.27
Amhara	15,470,900.00	5,811,820.37
Benishangul Gumuz	5,069,900.00	314,782.36
Dire Dawa	121,300.00	28,404.04
Gambella	2,978,282.00	62,124.61
Harari	33,400.00	3,625.08
Oromia	28,453,800.00	2,675,889.96
SNNP	10,588,718.00	944,196.94
Somali	27,925,200.00	1,055,774.45
Tigray	4,140,995.00	2,005,986.12
Total	102,040,495.00	14,290,010.42

Source: UNCCD (2010).

Climate Change

Climate change is both a cause and a direct consequence of rangeland degradation. Nearly all pastoralist areas of Ethiopia suffer from inadequate, erratic, and unevenly distributed rainfall. Like a self-fulfilling prophecy, drought is also one of the extreme climatic stresses that result in rangeland degradation and

more droughts. Soon there will be no recovery time for pastoralists and their livestock; the result is an increasingly frantic drift from one place to another.

Population and Demography

Ethiopian population projected to be 98.6 million (49.5 million male, 49.1 million female) (CSA, 2019). Average household size in Ethiopia is 4.6 person (5.2 in rural areas and 3.6 in urban). 25% of households are women headed households. Nearly half (47%) of the population is under age 15. 84% of the population in Ethiopia living in rural area with agriculture as the main livelihood. The country is home for 80% ethnic groups, some regions in Ethiopia are dominated by one ethnic group each and others as major second or minority, the three ethnic groups namely Oromo in Oromia region, Somali in Somali region, Afar in Afar region have a majority status in each region while SNNP regions are shared by more than 50 of different ethnic groups each have specific districts within SNNP presented with majority status in demographic and political context. Most popular religion in Ethiopia are Christian and Muslim, the two have religion followers shared nearly equivalent amounts at country level while it has varied along regional states. Accordingly the four project regions namely, Oromia region- Christian (47%) and Muslims (47%), SNNP- Christians (75%) and Muslims (14%) while in Somali (98%) and Afar regional states majority of the population are Muslims (FDRE - Population Census Commission, 2008).

Agriculture and Food Security

Since the majority of the households are rural and agriculture is the dominating economic activity, houses in Ethiopia tend to be congested, with poor-quality flooring, walls, and roofing, structure, and lacking basic utilities like improved sanitation, urban households are more likely than rural households to use improved sanitation (16% versus 4%). 77 percent of households depend on firewood for cooking makes biomass still remain the most important source of fuel for cooking in both rural and urban areas (CSA, 2017) (CSA and World Bank, 2020). Food is scarcer in the major planting season in major parts of rural Ethiopia, April to September. Rural households tend to be the most affected by seasonal food shortages. Major shocks that affect rural households are illness of a household member, unexpected rises in food prices, drought, and higher prices of inputs. To cope with major shocks, households mainly deplete savings or sell livestock (CSA and World Bank, 2020). Most of Ethiopian farmers and pastoralist primary income is crop and livestock production, additional income generation non-farm enterprise remained at low, only 23 percent of households have at least one nonfarm enterprise. The three main barriers to establishing non-farm enterprise in Ethiopia include lack of financial services, access to transportation and markets. In rural Ethiopia clothing and shoes are the most important non-food items bought. Households also spend substantial amounts on ceremonies, detergent, kerosene, fuel wood, charcoal, transport, taxes, and levies. The average household expenditure is lower in rural area than the urban one (CSA and World Bank, 2020).

Education

Although access to education steadily increased with some regional disparity, school dropout rates remain high. 35 percent of boys and girls aged 7–18 years (2.6 million) children in the primary school age group are out of school. Of these, the largest numbers include in Oromia, SNNP, Afar and Amhara. These regions consist primarily of pastoralist, Agro pastoralist and agricultural communities often affected by

natural and/or human-made disasters denoting regional inequities linked to exposure to conflict and natural disasters (UNICEF- Ethiopia, 2020). Educational attainment among women in Ethiopia is low, half of all women age 15-49 (48%) have no formal education, 56 % in rural and 22 % in urban areas. Women's educational attainment also differs among regions. The highest proportions of women with no education are in the Somali and Afar regions (75% and 74 %, respectively), and the lowest is in Addis Ababa (14 %). While this figure for Oromia and SNNP are 48% and 43% (CSA, 2014)(CSA, 2017). School enrolment is significantly higher in Agro-pastoral than in pastoral households (Berhanu Gebremedhin, Mengistu Woldehanna, Fiona Flintan & Poole, 2017).

Pastoral and Agro Pastoral Livelihoods

Pastoralists and Agro-Pastoralist (PAP) in Ethiopia constitute around 18% of Ethiopia's population and they lived in vast majority 60% of Ethiopia land area in Afar, Somali, Oromia, SNNPR, Gambela, Benishangul and Dire Dawa occupying 42 zones, 122 districts and covering 1.1 million km² , 95 % of these is rangelands while agriculture and unproductive land occupy 1.0 % and 4.0 % respectively (Birch, 2018). The main livelihood activities of PAP in ASAL areas are largely livestock production with a practice of traditional and extensive livestock rearing system (cattle, camels, goats and sheep). The Agro-pastoralists also make their livelihood from mixed agriculture system, mainly those households residing along the permanent rivers. Livelihood of PAP based primarily in ASAP areas faced with vulnerabilities due to recurrent drought, chronic water shortages, conflicts, market shocks (livestock and cereals price fluctuations), animal and human diseases. The livestock herd size per household in PAP is reducing radically as a result of shortage of pasture while PAP livestock resource remains share amount of countries livestock resources. Now livestock population of PAP accounts for 40% of livestock population in total (30% of the nation's cattle, 70% of goats and sheep and 100% of camels' population in the country) and is among the largest in Africa. The livestock sub-sector in Ethiopia contributes 12% to total GDP and 45% to agricultural GDP (MoP, 2019a). Currently, pastoral interventions are primarily implemented under the auspices of two major ministries, the ministry of Agriculture and ministry of Peace. Non-governmental organization working in pastoral areas use a different institutional arrangement based on their regional presence. Previous experiences show for successfully implementing development programs in pastoral areas requires a capable and stable focal institution with adequate resources and a long-term commitment to coordinate, direct, and implement programs. With some exception of the, most of previous projects had too-short lifetime and too small investments to bring about significant change in Ethiopia's ASAL PAP. Over the last 50 years, around 1 billion US\$ has been invested in the development of Ethiopia's pastoral areas (Gebremeskel et al., 2019).

Table 6: Pastoral and Agro-Pastoral (PAP) household proportion

Regions	Pastoral	Agro-Pastoral
Afar	62%	38%
Oromia	19%	81%
Somali	71%	29%
SNNP	29%	71%

Source: RPLRP (Regional Pastoral Livelihoods Resilience Project) project baseline survey, 2017 (Gebremeskel et al., 2019).

Customary laws, norms and values

Pastoralism and Agro Pastoralism is the major livelihood in ASAL area, PAP as a livelihood and way of life has strongly linked with solid cultural and social ties, ethnicities, identities, and traditional institutional settings spanning the international border. Since most of pastoralist communities of Ethiopia shared borders and their livelihood are usually crossed intra and international borders, these communities engage in a wide range of cross-border activities and adopted different sharing arrangements around the common natural resources, as well as the trading of livestock, livestock products and other commodities, exchange of information (on livestock prices and water and pasture availability) and sharing of basic services (Pavanello & Levine, 2011).

Customary conservation activities and rules in relation to pasture and water (two limited resources who needed dearly by the pastoralist livelihood), have also long been used by pastoralist communities to maximise efficiency, sustainable use of land use and increase its productivity. Livestock mobility is also guided by *finna*, a complex concept referring to the overall quality of the grazing environment, which enables animals to get the best benefit out of it. There are customary rules for establishing pasture reserves (called *kallo* in Oromo) near to pastoral settlements for use by weak, young and lactating animals that cannot move long distances during the dry season. Customary rules named *Meri* also govern the use of water sources as recorded among Borana community where animals are not directly watered from the main water source instead animals drink from filled water on scraped tree. *Meri* helps to ensure that the water source remains clean while serves both human and the livestock (Pavanello & Levine, 2011).

Conflict Management

Conflict among Ethiopian pastoralist usually grouped in one of the following conflict typology. (1) Between groups within a clan (2) Between clans of same ethnic groups (3) Between farmers and pastoralists (4) Between pastoralists and investors (5) Between pastoralists and the states (6) Between ethnic groups and (7) Trans-border conflict (Mussa et al., 2017). Strategic decisions and development projects directed to attain improved livelihoods in pastoral and Agro pastoral communities should observe proper consultation and participatory planning that respects pastoralists' rights to free mobility, minimizing political interference, and recognizing indigenous life style including cultural conflict resolution mechanisms. Incidence of conflict in Ethiopia PAP communities rise in number and magnitude during drought season where competition for scarce water and pastures intensifies. In addition to drought other drivers of conflicts between different ethnic groups are disputes over political and administrative boundaries and borders (between regions/zones), ethnic or clan rivalries, weakness of governance and rule of law structures, and communal revenge attacks (Gebremeskel et al., 2019).

Customary law and norms also developed to be used as Indigenous conflict resolution mechanism Among Ethiopian pastoralists communities and remained very helpful for controlling and resolving conflicts, while being overlooked for so long by government to recognise and considering customary practices as alternative conflict resolutions mechanism. Elder's council has been used widely for inter and intra conflict among pastoral communities and they are practically proven for effectiveness in resolving

conflicts with sustained efficacy since customary ones are more socially and culturally friendly. For this reason the management and resolution of conflicts through customary institution remain widely preferred and utilized in different pastoral areas of the country(Mussa et al., 2017).

Leaders of indigenous institutions play a proactive role to promote social cohesion, peace, harmony and co-existence; and a reactive role in resolving disputes which have already occurred. The indigenous institutions usually involved in inter and cross community conflict resolution to find appropriate solutions to the existing conflicts based on the values, norms, complexity and culture of the society, and accordingly of significance to the conflicting parties. Most important elements involved in such mechanisms are the traditions of forgiveness and of respect for elders because of their symbolic authority to enforce decisions and implement compensation. Indigenous conflict resolution typically incorporates consensus building based on open discussions to exchange information and clarify issues(Zigale & Tenaw, 2021).

Social and Economic Infrastructure and services

More than one-quarter (26%) of Ethiopian households have electricity. Nearly all urban households (93%) have electricity, compared to 8% of rural households(CSA, 2017). Connection to the main grid supply systems seems to be better in the agro-pastoral than in the pastoral households of Afar and Borana. In Afar, about 11% of agro-pastoralists and about 3.83% of pastoralists are connected to the main electric supply system. In Borana, about 14% of agro-pastoralists and about 3% of pastoralists are connected to the main supply system. Solar power supply is more widely available than the main electric supply both in the pastoral and agro-pastoral areas. Between 6.74% (SNNPR) and 11.71% (Afar) of agro-pastoralists reported access to solar power, while between about 4% (Borana) and about 10% (Somali region) of pastoralists reported access to solar power. No pastoralist reported access to solar power in SNNPR (Berhanu Gebremedhin, Mengistu Woldehanna, Fiona Flintan & Poole, 2017). More than half of Ethiopian households have a mobile telephone (56%), 28% have a radio, and 14% have a television. Urban households are more likely than rural households to own a mobile telephone, radio, or television. 15% of women and 25% of men use a bank account. The mobile ownership among men reached to 55% and 25% among women, among mobile phone owners, only 5% of women and 9% of men use the phone for financial transactions (CSA, 2017).

Agro pastoralist and pastoralist systems in Ethiopia ASAL are thought to contribute 35% of red meat and 56% of milk to Ethiopia's livestock sector GDP. Livestock traded figures from informal uncontrolled cross-border is estimated at four to six times that of formal exports by volume, and twice formal exports by value(Birch, 2018). The sale of livestock is the most important contributor to the cash income of both pastoral and agro-pastoral households in all four lowland regions under. Next to livestock sale, the second most important contributor to cash income (all households) varies by region – crop farming in Oromia (Borana) and SNNPR, business in Somali region, and miscellaneous sources such as the Productive Safety Net Programme (PSNP) and other transfers in Afar. Pastoralist area of Ethiopia is usually far from central market and close to international borders. A number of studies proven the importance of location, particularly for market access. Poverty rates have been found to increase by seven percent for every 10 kilometers distance from a market town in Ethiopia. Agricultural, agro pastoral growth has shown a

strong impact on poverty reduction in Ethiopia, this has only been in areas close to urban centers of 50,000 people or more who had a great market demand and premium price for urban inhabitants traded with their product (Birch, 2018).

Ethiopia ASAL areas have huge potential to become the hub for industrialized red meat and camel milk to supply domestic and export markets if received massive private sector engagement. The private sector could mobilize capital for constructing large-scale livestock facilities for livestock product processing and mobilise both technical and business capacity to run such facilities efficiently. In 2016, 14,453 financial cooperatives were existed throughout Ethiopia, some of these cooperatives covered in ASAL areas of Ethiopia, relatively low in coverage and numbers in related to other parts of the country both public and non-state initiatives have contributed for the gradual increase of cooperative that targets pastoralist community development. Rural Saving and Credit Cooperatives (RUSACCOs) are demonstrated as effective tools to facilitate diversification of income and to create employment opportunities in pastoral areas. Due to the very reason that conventional banks' and microfinances' service are inaccessible for the majority of pastoralist, RuSACCOs are the option to bridge this gap (Mulugeta Getu, Tesfaheywet Zeryehun, Kibebew Kibret & Hailemeskel, 2016).

Baseline report from 2017 in the ASAL areas of Ethiopia shows various ways of savings are used among PAP; most saving is made at home, except in Borana. About 82.5% of savers in Afar, 75% of savers in the Somali region and 73.68% of savers in SNNPR reported saving at home. Only about 21.37% of savers in Borana saved at home. Use of savings and credit groups to save money is very low in Afar (only 2.5% of savers used it) and the Somali region (only 8.33% of savers used it). More than a quarter of the savers in Borana used saving and credit groups, while about 19% of savers in SNNPR used this means (Berhanu Gebremedhin, Mengistu Woldehanna, Fiona Flintan & Poole, 2017).

Minerals and NTFP

In pastoral areas of Borana and in Afar region Elidar woreda specific area Dobi salts are important both for livestock production and for people's health. Different types of crude salt are extracted. The salts are found in different parts of Dirre area, Borana and Dobi in Elidar Afar region where salt is extracted. The salt is harvested from crater lakes in specific seasons. Poor households excavate it to sell within adjacent areas. To use this resource more efficiently an NGO, in collaboration with the woreda cooperative promotion office, has established salt extraction cooperatives by providing seed money, training, an office and furniture. The aim is to benefit destitute and poor pastoralists. This approach may increase the income of the pastoral households involved. It is hoped that pastoralists will be able to double their income.

Gum and incense trees grow in Somali Region (Afder, Fiq, Liben, Gode, Warder and Degehabur Zones), Borana, South Omo (Hamer, Bana Tsemaco and Maale) and Afar (Zone two). But these resources are currently not wisely exploited and utilized. In Afar, the pastoralists collect incense for household consumption only. In Somali Region individual pastoralists collect gum and incense for sale to local middlemen. The middlemen then resell the produce at a profit to different parts of the country, especially to Addis Ababa. In Borana and South Omo individual pastoralists collect gum and incense and sell it at local markets. In these cases there are no middlemen and recently co-operatives have been established to facilitate the production and marketing of frankincense.

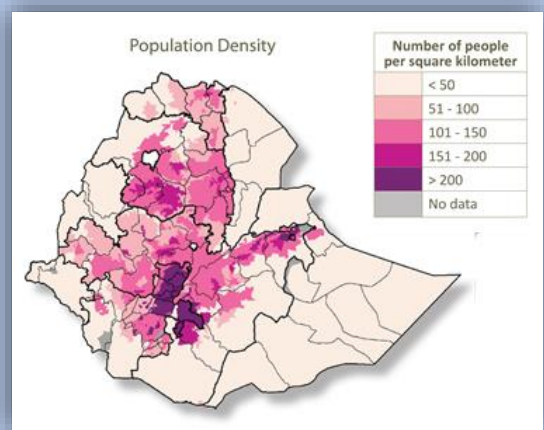
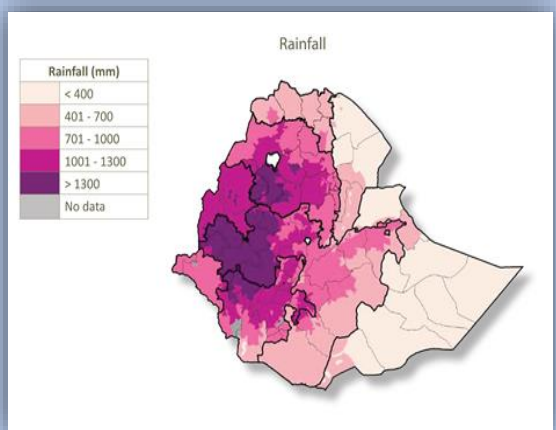
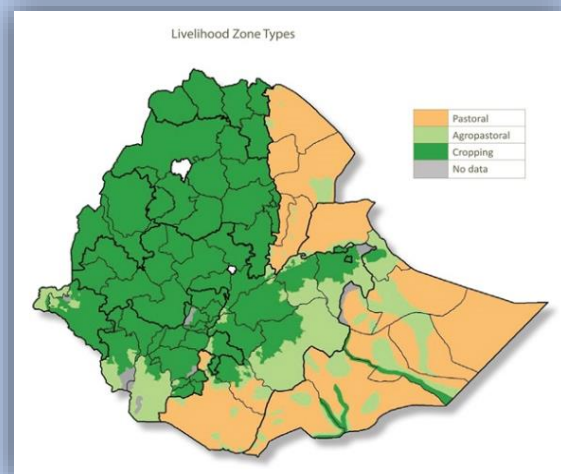
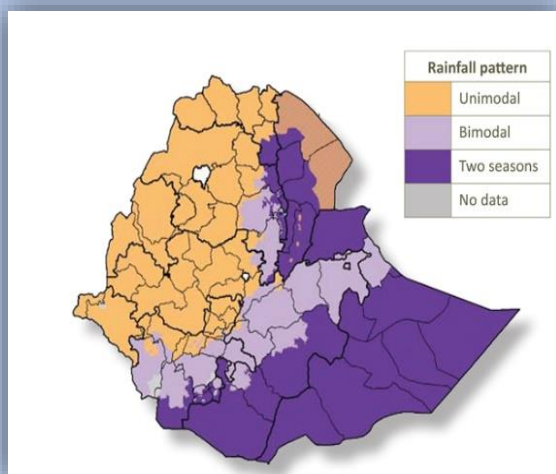
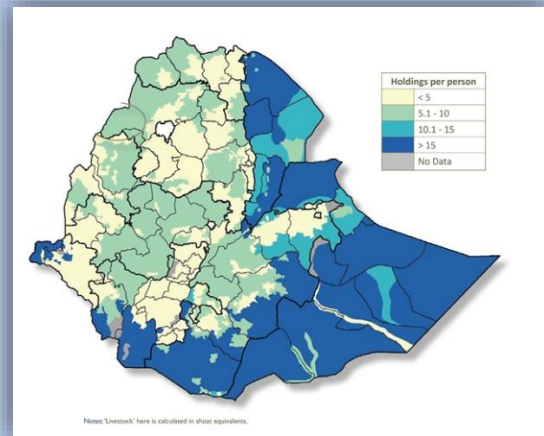
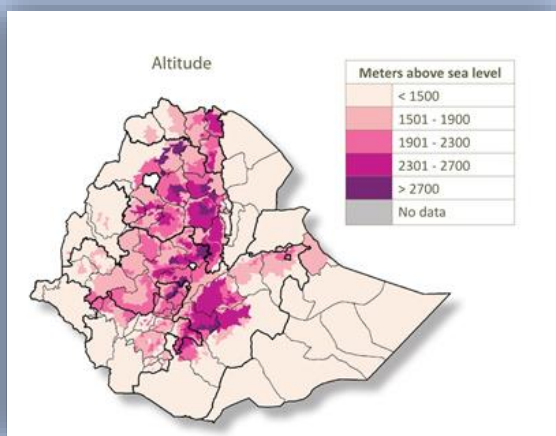


Figure 1: Ethiopia Physical and Livelihood Maps

Bio Physical and socio-economic map of Ethiopia Adopted from the book :An Atlas of Ethiopian Livelihoods' The Livelihoods Integration Unit USAID / Data Source: Livelihoods Integration Unit (LIU)/Ethiopian Ministry of Agriculture and Rural Development (MoARD)

3.1.2. Oromia Region

Oromia regional state is the largest region in Ethiopia with a total land area of 353,000 km², and accounts for almost 32% of the country. Oromia population in 2019 is 37 million (18.68 million male and 18.58 million female) (CSA, 2019). Oromifa (Oromigna) is the official language. It constitutes 83.5% of the spoken language. Other major languages are Amharic 11%, Guragigna (Sebatbet, Sodogna, Siltigna and Hadiyigna together), 0.98%, Gedeogna 0.98% and Tigrigna 0.25%. Oromia regional state shares boundary with all regions in the country except Tigray; to the east, it is bounded with the Somali region; to the north, the Amhara Region, the Afar Region and the Benishangul-Gumuz Region; to the west, South Sudan, Gambella Region, and Southern Nations, Nationalities, and Peoples' Region; and Kenya to the south. Oromia is a region of great physiographic diversity. Its landscape includes high and rugged mountain ranges, undulating plateaus, panoramic gorges and deep incised river valleys, and rolling plains. Mountain Batu (4607 m.a.s.l) is the highest peak of the region. Oromia is endowed with varied geographical features which in turn creates varied climatic condition and other rich natural resource bases.

The climatic types prevailing in the region may be grouped into three major categories: the dry climate, tropical rainy climate and temperate rainy climate. The dry climate is characterized by poor sparse vegetation with annual mean temperature of 27 °C - 39 °C, and means annual rainfall of less than 450 mm. The hot semi-arid climate with annual temperature varying between 18 °C - 27 °C is area of pastoralist and agro- pastoralists. It has a mean annual rainfall of 410-820 mm with noticeable variability from year to year. Awash, Wabe-Shebele, Genale, Gibe, Baro, Dedessa and Guder are major rivers in the region. The crater lakes such as Green Lake, Bishoftu, Kuriftu, Bishoftu-Gudo, Hora-Kilole, Horsa Arsedi, and the rift-valley lakes of Ziway, Abiyata, Shala, and Langano are found in this region. These water bodies are suitable for recreation and fishery development. Oromia region have also home for around 800 bird species and more than 100 wild animals. Endemic wild animals such as Red Fox and Menelik Bushbuck are found in the Bale mountains national park. The Awash National Park is home to the Oryx, Kudu, Caracal, Aardavark, Colobus Monkey, Green Monkeys, Baboons, Leopard, Klipspringer, Hippo, Semarang's, Gazelle, Grevy's Zebra and Cheetah. The Awash National Park has also bird sanctuary some of which include Limburger, Wattle Crane, Anger Buzzard, Verreaux Eagle and long eared owls. Water Fowls, Shore Birds and the colourful Ruddy Shelled Duck as well as the endemic Blue-winged Goose are common in the marshy areas of the park.

The hot springs in Walliso and Sodere (about 114 km south west and east of the capital respectively) are popular attraction sites for tourists. The Sof-Omar caves in central Bale, with their galleries of polished white cone and chamber of columns are natural phenomena of great interest and beauty. The palace of Aba Jifar in Jimma is another historical attraction in the region.

Majority of Oromia region population 88% are from Oromo ethnic group. The remaining 12% accounted for Amhara, Hadiya, Sidama etc. 48% of the population in the region are adherents of Islam, followed by 30% Orthodox Christians, 18% Protestants, 3% traditional believers, 0.5% Catholic, and 1% others. The economy of Oromia Regional State depends on agriculture, which contributes about 66% of the regional GDP and provides an employment opportunity for more than 89% of the regional population. Mixed farming dominates the livelihood of the region. Oromia accounts for 51% of the total Ethiopia crop

production, 45% of the area in the region is under temporary crops. Coffee is the main cash crop in the region. The major crops grown in the region are coffee, wheat, barley, teff, sorghum and oil seeds. The region is also endowed with livestock resources (44% of the total livestock population of Ethiopia). Traditional range management practices have deteriorated, and development in the water sector for various purposes has led to the degradation of some wet season grazing areas. Grazing land has been taken away from pastoralists for irrigation and for resettlement. Bush encroachment to the grazing lands is also a serious problem the naturalist and agro pastoralist is currently facing threatening their livelihood.

The Oromia Region consists of 21 administrative zones and 180 woredas. Pastoralism is practiced in 7 zones and 42 woredas in Oromia covering 152,070 km² of predominantly savanna-type grassland that supports cattle, Camels, and small ruminants. The pastoralists in Oromia are transhumant. The Borena zone in southern Oromia hosts the largest pastoralist group in the region. Pastoral and Agro Pastoralist in Oromia are less diversified and less market integrated. Borena Zone, West Guji Zone and Guji Zone are the three Oromia zones where 7 projects woredas are identified (MoP, 2019b).

3.1.3. SNNP Region

SNNP region population in 2019 is 20 million (9.95 million male and 10.13 million female) (CSA, 2019). The region is located in the southwestern part of Ethiopia. The SNNP region borders with Kenya to the south, part of Lake Turkana, the Ilemi Triangle (a region claimed by Kenya and South Sudan) to the southwest, South Sudan to the west, the Ethiopian region of Gambela to the northwest, the Oromia Region to the north and east, and the Sidama Region to the east. SNNP comprise 10% of the total area of the country.

Amharic is the working language of the state; Multi-ethnic groups that add to more than forty-five indigenous ethnic groups characterize the state. Predominantly spoken languages in the region include Gruagigna 14.72%, Wolayitagna 11.53%, Hadiyigna 8.53%, Keffigna 5.22%, and Kembatigna 4.35%. Other languages spoken in the State are, Gamoigna, Malo, Goffa, Gedeo and many others. The working language of the state is Amharic. Based on ethnic and linguistic identities, the region is divided into 13 Zones. These are sub-divided into 126 Woredas (districts) and 8 special Woredas. 56 ethnic groups are found in the region with diverse and distinct languages, geographies, cultures, identities, survival mechanisms and socio-political histories. The region covers a total area of 113,539 square kilometres. It enjoys environmental diversity and diverse cultural life. The lowland areas are characterized by arid and semi-arid while the highlands have cool temperate climate and high rainfall.

The mean annual rainfall ranges from 500-2200 mm. Its intensity, duration and amount increase from South to Northeast and Northwest. The mean annual temperature in general ranges from 15 °C - 30 °C. Many perennial and seasonal rivers are found in this State. These include, Omo, Gojeb, Mago, Segen, Woito, Akobo, Dima, Wabi, Wolga, Bilate, and Genale River. Among the known Rift Valley lakes are Awassa, Abaya, Chamo, Chew Bahir and Rudolf. These rivers can be utilized to produce food crop and fish and for irrigation and hydroelectric development. There are 23 kinds of wild animals and 300 species of birds. Some of the wild animals found in this region are Elephant, Lion, Giraffe, Leopard, Zebra, Monkey, Lesser kudu, Water Buck, Crocodile, Rhinoceros, Warthogs, and Buffalo. The State is rich in natural resources. These include, water, mineral, fauna and flora. Some of the minerals of the region

include gold, coal, mineral water, clay, ditomite, scoria, limestone, mica, nickel, iron-ore, and asbestos (MoP, 2019b).

Coffee is the most important cash crop. Other major crops of the region include maize, teff, enset, potato, and wheat. Coffee is the most important cash crop. Other major crops of the region include maize, teff, enset, potato, and wheat. Some of the major tourist attractions of the State are lakes, Tropical forests such as Kaffecho, Shekecho and Omo zones are wonderful places. The Nechsar, Mago and Omo national parks are found in this state. These national parks are centres of tourist attractions.

Three of the SNNP Zone has pastoralist and agro pastoralist cover an area of over 12 woredas. Pastoralists in SNNPR are transhumant and move seasonally in search of grazing areas and water. They keep cattle and small ruminants. Their economy is very poorly diversified and not very integrated with the market. South Omo, West Omo, Kefa and Bench Maji were the 4 zones which 8 project woredas are identified.

3.1.4. Somali Region

Somali Regional State is the second largest region in Ethiopia next to Oromia regional State at approximately 280,000 km², Somali region population in 2019 is 6 million (3.23 million male and 2.81 million female) (CSA, 2019). The region is located in the south-eastern part of the country. Jijiga is the capital of the Somali Regional State the region has also longest Ethiopia international border that shares with Somalia, Djibouti, and Kenya. The region also shared long border with Oromia and Afar Regions of Ethiopia. Cross-border and cross-regional access to grazing resources and markets are critical for Somali region pastoralists.

The majority of the region has an altitude of 900 meters above sea level and in some areas the altitude reaches 1600 meters. Of the total area size of the State approximately 80% is flat & 7% mountainous. Regarding climate, 80% of the region is classified as lowlands, 5% highland, and 15% of the area fall under temperate category. The maximum temperature reaches 32 °C-40 °C. In the temperate areas the temperature is within 20 °C-28 °C. The mean annual rainfall of the State is estimated to be 300-500 mm. Most of Somali Region is arid and semi-arid, the Somali region have many rivers (Wabeshebele, Genale and Weybe Rivers) that can be harnessed to expand irrigation and sustainably produce food crops to pastoral and agro-pastoral communities of the region.

Most of the people of the state of Somali mainly earn their livelihood by rearing livestock. Some people in the region also practice crop production as well. The major crops cultivated in the region are sorghum and maize. Wheat and barley are also harvested in a smaller amount each year. Commercial activity is another occupation that is significantly exercised in the region. The region is inhabited by one of the largest pastoral communities in the HoA and the largest in Ethiopia. About 70% of the population in the region are pastoralists who keep cattle, camels, and small ruminants. The region is estimated to have about 15.2 million domestic animals out of which sheep constitute 53%. Goats and cattle are the second

and third most important domestic animals in the region accounting for 20% and 15% respectively. Camels are actually the most important animals in day to day life of Somali pastoralists, and they constituted about 9% of the livestock (MoP, 2019b).

Low rainfall, high temperature, lack of infrastructure is the major constraints in Somali region. The development of irrigated agriculture in fertile areas of the above rivers basins and the exploitation of perennial springs, seasonal floods and rain water harvesting elsewhere in the region for irrigated crop and pasture production can be identified as potential development intervention. In the rain fed areas, the use of drought resistant crop varieties together with soil and water conservation techniques have potential to improve farm production and productivity. Liben, Afder, Korahe, Jarar, Fafan and Sitti zones are the six Somali region identified zones were 8 projects woredas are potential candidate for the projects.

3.1.5. Afar Region

The Afar National Regional State is situated in the North-eastern part of Ethiopia and has an area of about 94,760 square kilometres. Afar region population in 2019 is 1.9 million (1.03 million male and 0.86 million females) (CSA, 2019). The region has common boundaries with the State of Eritrea in the north-east, with Tigray in the north-west, with Amhara in the south-west, with Oromia in the south, with the State of Somalia in the south-east and with the Republic of Djibouti in the east. The State of Afar capital city is Semera, the state consists of 5 administrative zones, 29 woredas and 28 towns. Afar region is the origin of human species, where a 4.4 million years old humanoid is recently discovered.

The Afar pastoral community is leading a communal life (using natural resources communally) moving from place to place in search of water and grazing. The major livelihood and economy of Afar region is livestock and the natural resources. Livestock in the region is not properly managed in line with the availability of grazing and water distribution has contributed to the degradation of the natural vegetation, the loss of the fertile top soil through wind and water erosion; and intensification of desertification. The region exhibits a physical feature that is mostly plain and an altitude of less than 1500 meters above sea level, an altitude that further falls from west to east. The lowest point in the Country, Dallol depression is 126 meters below sea level. The lowland areas of Afar are generally below 1600 meters above sea level. The highest peak, mount Mussa-Alle is 2063 m.a.s.l.

The climatic condition of the region is mostly hot, desert type and partially dry. As a result, the region exhibits high temperature, and low rainfall that is not distributed uniformly. Temperature varies from 25°C during the rainy season (September-March) to 48°C during the dry season (March-September). The average annual rainfall registered for 11 years at Dubti station was 187.9 mm. 22.4% of the total area of the region could be developed for agricultural activity and 25.7% of the total area of the region is suitable for grazing purposes. On the other hand, about 70.9% of the region land mass is denuded and devoid of vegetation. In the rainy season that is usually scarce, about 54.9% of this denuded part of the region gets little rainfall. The grasses that are grown as a result of the little rains in this area are used for grazing purposes and remained only for a short period of time.

According to the Affar land use study document 2008, it covers an total area of about 94,760 square kilometers. The land use study indicated that about 7.0% of the total area of the region is suitable for crop production; and 22.4% of the total area of the region could be developed for agricultural activity. However, only about 1.2% of the total area of the suitable area is used, about 25.7% of the total area of the region is suitable for grazing purposes and about 70.9% of the total area of the region is denuded and devoid of vegetation. In the rainy season that is usually scarce, about 54.9% of this denuded part of the region gets little rainfall. The grass shoots that appear as a result of the little rains in this area are used for grazing purposes, though, for a short period of time.

The Awash River, Mille and Logia which are tributaries of the Awash River cross the region. Abbe Bil, Afambo and Adebhel lakes which are connected to the last section of the river Awash, are found in the region. Salt, Potash, Sulfur, Manganese, Bentonite, Aluminium, Marble, Gypsum and Petroleum are possible major resources of the region. The state has also a plausible source for solar energy. Yagund-Ras national park and the Dallol depression are some of the tourist attraction sites in the Afar region. Wild animals in the park include Abyssinian wild ass, Grevy's zebra, beisa oryx, crocodiles, lions, grater kudu, wild (bat eared) fox, wild cat, cheetah, Grant's gazelle, and warthog. At Global scale the region also known for its arachnological significance Hadar, which is 4.4 million years old humanoid is found in this region (MoP, 2019b).

Afar people belong to the Cushitic-speaking language groups in Ethiopia and the society is structured into clans and sub-clans. 80% of the population in Afar region are pastoralists and the remaining 20% are agro-pastoralists. Afar pastoralists are transhumant, usually move out seasonally to manage their livestock production system. The Awash river Valley is an important grazing area for livestock and also provides opportunities for irrigated agriculture.

Afar pastoralist livelihoods systems are becoming increasingly vulnerable. Human populations are rising, the climate is changing, and international markets are setting ever-higher barriers for access. Infrastructure is poorly developed; education and literacy levels remain very low and competition for scarce resources is increasing. Five zones are identified in Afar regions were 7 project woreda are identified.

3.2. Results of Stakeholder Consultations

The field visits were undertaken in two groups that one group went to Afar and Somali Regional State and the other group to Oromia and SNNP regional state. The team had extensive discussion with the respective officials, experts and with communities at Regional, and representative woredas.

The main field work at region and woreda adopted rapid appraisal to cover within four regional offices, 8 woredas and some site visits at project kebele that cover 10,000 km's in 10 days. The field work made to assess the institutional arrangements, existing regulations, and capacity for ensuring appropriate environmental and social management in the planning and delivery of the proposed program interventions; review the performance of environmental and social safeguards in the program

implementing institutions; Natural resource management potentials and challenges, institutional arrangement, grievance redress mechanism, and identify possible challenges and opportunities to achieve safeguards commitments under the proposed program, and social safeguard activities in the region. The field work managed to done with the given time limit assisted the ESIA team to supplement the desk reviewed works and stakeholder discussion made previously with national level to the real situations existed in the four project regions and DRSLP I and non DRSLP I woredas selected for the upcoming DRSLP II. Main features of the team finding toward safeguard and supporting information on environment and socio-economic issues are discussed below.

The DRSLP project coordination at national level has a safeguard officer for environmental, social and gender but the role at region and woreda level has some irregularities. In most of the regions, the DRSLP I coordination offices have not a permanent staff responsible for environmental, social safeguard and gender activities. Usually regional project experts for engineering or livelihood officers took over as a focal person to take these responsibilities. And usually these experts are busy enough within their main duties and responsibilities as livelihood or engineer so that couldn't have time for oversee the duties of environment and social safeguards responsibility given to them as focal person.

At national level environment, forest and climate change commission is responsible organ that oversee the environmental impact assessment of pupil and private projects while expert at ministry of agriculture and DRSLP project safeguards officers at national PCU are responsible to make sure subprojects are planned and implemented with the way the project impact assessment and management plan are approved by the oversee body. At region level the oversee body is bureau of forest, environment and climate change and the project safeguards officers is the responsible person to the implementation and reporting of environmental audits to the bureau. But the safeguard arrangements at woreda level in most of the woreda are in the initial stages. The regional forest, environment and climate change bureau have not active installation and staffs for the oversee role so that regional experts from the bureau are responsible for field monitoring and environmental audits roles in the development and investment projects implemented by both the public and private. DRSLP I woreda coordination office have only project coordinator and project finance officers, so the project coordinator is responsible for the environmental and social safeguards activities of the project, they prepared quarterly safeguards reports and send to regional project safeguard focal person and the national PCU safeguard officer will aggregate the reports from each of the four regions and communicated it with the bank and other stakeholders'.

As observed during the field visit at woreda, the project has adopted and used environmental and Social Screening Form (ESSF) which are designed to assist in the social and environmental safeguard management and monitoring of sub-projects of the DRSLP I in Ethiopia. The form is a guide in the identification of potential social and environmental impacts of sub-projects at the design stage, determine requirement for further environmental analysis and impact mitigation measures, define responsibilities for their implementation and monitor progress.

The ESSF have list of questions to systematic identification of sub-projects potential environmental and social impacts. The checklist are usually will be checked as yes or no , and the list of questions include: presence of environmentally sensitive areas or threatened species that could be adversely affected by the project (forests, surface water courses, natural springs, wetlands , area of high biodiversity, habitats of endangered/threatened/ rare species), for any possibility for adverse risks on the rivers and lake ecology, drainage conditions on-site (risks of water retention, disturbance to the ecological flow of rivers, if the site has high flooding, risk of siltation, increase in erosion risk), Water use and water users (risk of depletion of rivers due to overexploitation, risk of depletion due to wells overexploitation, risk of conflict between users, risk of diseases by the proliferation of disease vectors/water-borne diseases and risk of water pollution due to the use of pesticides and other agro chemical products), Protected areas (risk of destruction of vegetation, overgrazing around water points, risk of use of considerable amount of natural resources , risk of depletion of natural resource and risk of rock fall and landslide), Contamination, pollution and health hazards, damaging historical, archaeological or cultural heritage site, block of access and routes or disrupt normal operations in the general area, block of access and routes or disrupt normal operations in the general area, resettlement and/or land acquisition, does proper public consultation made on the planned project and does it has environmental and social management plan for the implementation of the sub-project.

Based on the outcome of the above screening, the designatory approval office will decide if is there a need for a more in-depth and separate Social and Environmental Impact Assessment (ESIA) , if the sub project didn't need separate ESIA , the ESSF concluded with a mitigation table for identified risks and usually written in table as environmental and social management and monitoring tool, the content include information of nature of impact, mitigation measures, stakeholders and their responsibilities in the implementation of the measures, schedule of implementation, estimated cost of implementation and finally time schedule for periodic monitoring and reporting (monthly or quarterly). ESSP check list form filled and approved by the regional environmental protection oversees offices.

The DRSLP I also adopted a voluntary asset form when the project secured a land for the proposed sub-projects including pastoralist training center, livestock health post, livestock health center, livestock market center and other construction. Since most of the land in pastoralist is communal in nature the voluntary asset form used by the project secured the land using consultation with the community and the form is signed by the kebele leaders. The size of the land usually ranges from 0.25 hectare for health post or training center to 2 hectares for livestock market. The voluntary asset form information also includes on the minutes of the community meeting who own the communal land, the size of the land to be transferred and GPS coordinates.

The experience of DRSLP I and familiarity of project staffs with the environmental and social safeguards would have a great inertial for enhancing the next phase project implementation if supported with continuous experience sharing session across different safeguards oversee office and project implementing experience from different projects based in the pastoralist communities as well as allocating resource for staffing the safeguards offices at national and regional level for proper

implantation of ESMP and monitoring. Budget allocated for ESMP should be timely accessed by relevant woreda project coordination for timely mitigation measures implementation and other activities related to Women usually have overburden by both reproductive and productive duties including food preparation, house making, child caring, taking care of sheep and goats, shopping, collecting drinking water and other routine business. So, whenever there are initiatives to participate them in projects including cash for work NRM activities, women are obligation to attend the whole days equally as the men (who have fewer routine burdens), incapacitate the women to attend while they have strong interest to participate and generate income. Women travel long distance (up to 10 km's and above) each day in areas where water is scarce to collect water for both household consumption and to their livestock, these make additional burden to women, make more vulnerable for gender-based violence and sometimes attacked by wild animals. During lean season and drought sheep, goats and children of large livestock's will remain within the households to be cared by women, while the men took the camels and cattle to areas far from their home for months in search of pasture and sometimes these involve crossing of regional and international borders.

Although the incense and gum resources are available, the community does not use them for its own benefit, as there is a favorable climate and organizing the community (youth) by providing the necessary training, apart from increasing its income by developing its resources and it will have a significant role to play in environmental protection, climate change and resilience. Most of the project are specially Afar and Somali regions invasive alliance species /Prosopis /juliflora/ it is causing serious problems on grazing and agricultural land caused shortage of grazing land for livestock and crop production and have allelopathic effects, injuring livestock with its poisonous thorns and causing goat teeth to rot and fall out because the small seeds get stuck between the teeth, Impacts to recreational opportunities and other human values. The invaded area by prosopis data collected from the relevant offices Study Document for 2021 and the examination conducted by this consultant team in the field are as follows: prosopis in Afar region 1,525,495ha, Somali 22,827ha, Oromia 2,812ha and SNNP 18,641ha. Although efforts to reduce the problem by cutting down the vegetation and turning it into charcoal are encouraging, it is necessary to work in coordination with the national strategy plan to find a lasting solution.



Figure 2: shows what is being done to cut down the prosopis in the Afar region and turn it into charcoal (photo Wondwosen Abeje.).

In addition, the issues raised during the discussion road access problem from woreda to kebele as well as kebele to kebele to facilitate market and value chain activities, Surrounding people and animals affected with waterborne diseases and malaria due to the fact that the surface water is collected in a pond to be used for drinking water and there is no water treatment system, plastic water collection /Roto/ is not feasible because of climate it needs environmentally friendly technologies should be provided, road access problem during the winter/rainy seasons/ in Gerani woreda Afar region, very critical it takes 2 days to reach Logia to sell and trade animals, and roads are flooded by the Awash River for 4-6 months, poor human and animal health facilities and services, illegal trade with neighboring countries, shortage of professional staffs, charcoal production and cause deforestation, limitation of alternative energy supply, facilitation of input supply and marketing by organizing associations, lack of solid and liquid waste management activities in urban and activities that create jobs for women, youth and people with disabilities.



Figure 3: Dolo Ado Woreda, Somali Region, solid waste is not being properly disposed of, and the right-hand pond serving for human and animal drinking water is not properly protected, causing malaria and water borne diseases (Photo: Wondwosen Abeje).

In Resources at household level including livestock and farmlands are managed by men and women heads of the households. But the dominant one deciding who has to use and control these resources is determined by the male head of the household. But as a customary practice woman are entitled to manage and use the milk from goat, cow and camel for household consumptions, sell some if they have in close access to local markets, besides women also generate incomes for demand to purchase of consumer goods or other basic expenditure by selling goat or sheep in the household. And the men head in the household are the once who decide to use, transfer or sale of large livestock's including cattle and camel with some consultation with the women heads and other members of the households. Communal resource including water and rangeland are managed by customary / traditional laws usually facilitated and lead by local tribal (clan) or religious leaders. Since water sources and availability of pastures in rangeland are varied across seasons and year due to weather and climatic conditions pastoral communities temporarily or permanently move from one place to another to pass the lean season or getting more sustained supply of the two key resource , in case of temporal movement for water and pastures the pastoral communities move far placed with their camel and cattle's , and this involves also crossing international borders to Djibouti, Somali , Kenya. Local tribal or religious leaders across different

group lines work together and exchange views for preventing or resolving conflict that could happen in the due process.

Most of the areas covered by the field visit are dominated by pastoral livelihood; only small proportions have access to irrigated lands to be involved in Agro-pastoral livelihood. Since in pastoral communities' main land resource is owned by the community as communal land, private land ownership not a common case beyond a small perimeter as housing compound. But some Agro pastoral livelihoods are found based along the agricultural water sources by accessing through flood or canals from rivers. For the Agro pastoral communities the farm land ownership and control usually given for male's household head and it's the male dominantly decide who has to grow in the farms with no or some consultation to the women.

Since the pastoral community are traditionally male dominance in decisions that have stayed for centuries, conflict within the household are expected to be under reported or overlooked, and whenever happened solved in customary laws involving local traditional leaders. In areas like Somali region household conflicts arise from male's expenditure to stimulants like chat and other related consumptions and sometimes they sold the cattle for these mere purposes.

3.3. Lesson learned from the previous projects

While there is no significant observed negative impacts induced from previous different development interventions, one case need to be used as a lesson here is one micro dam approved and started to be built in afar region creates grievance in the community since the water reservoir of the dam identified by the local communities for interrupting/cut road that connected villages. After receiving the grievance, the woreda project coordination along with woreda administration in the project area made consultation with different stakeholders to resolve the issues. The grievance finally resolved after the administration together with stakeholders made a decision that another project involved in the area took the initiative to allocate some fund to changing the roots of the road to be covered by the micro-dam so that both the road and greatly expected micro dam development to be constructed so that the community have access for both vital infrastructures.

The consultation and site observation by the team also identified some issues that need attention for its potential effect on the environment and social implication as secondary impact or a way that can be used to enhance the project environmental and social impacts.

Integrating different infrastructures and services in one place start with water infrastructures and followed by other infrastructures or services including animal clinic, pastoralist training center and market should be followed along the water infrastructures. Reason for this is that pastoralist builds their homes usually near to the place they could easily access water and usually these water infrastructures could only build in area ground or surface water resource are available, so that other services build along the water sources could encourage project effectiveness and villagization.

Participating the community for skilled and non-skilled labor both in project implementation and by contractors for sub-projects has challenges from low working culture and skilled labor may not be locally available as needed. To these end initiatives like organizing experience sharing visits for the pastoralist community and community leaders to other parts of Ethiopia selected for successful community

mobilization for land rehabilitation and sustainable land management with helps in long-term improvements in working culture.

In some cases, some infrastructures build by DRSLP I that need permanent staffing from public office like PTC, animal health centers, health posts, the completed infrastructures couldn't start services in some region due to regions unable to allocate the required personnel and running cost. Steering and technical committee at region and woreda level should be pushed to be more functional and successfully takeover of infrastructures build by the project for continuous operation and budgeting.

Project plan should follow bottom up process to address priority and felts needs of the community at local areas. Some of the project woreda recently experience with fresh cross region state conflict, like the conflict between Afar and Somali pastoralist for regional border, pasture and water has long history mainly in weredas found zone one.

Although the incense and gum resources are available, the community does not use them for its own benefit, as there is a favorable climate and organizing the community (youth) by providing the necessary training, apart from increasing its income by developing its resources and it will have a significant role to play in environmental protection, climate change and resilience.

Previous work on environmental protection and development in DRSLP-I and similar projects the ecosystem has been improved by diversifying physical and biological activities (trench, soil and stone terraces, water harvesting, encroaching and conserving degraded areas) enriching ecosystem services: .improving regulating ecosystem services, ground water recharge, erosion control, pollution reduction; Provide Provisioning ecosystem services: access for water for domestic livestock, forage for livestock's, and has esthetical value.

Deep wells are being constructed and distributing with the help of a generator. However, due to climate change, generators have a role to play in polluting the environment, so use non-polluting alternatives (solar, wind, etc.).

Since most of DRSLP II proposed woredas are found in IGAD clusters, cross border conflict is common due to long-term and season movement of communities crossing the international borders as refugee of conflict and drought. Even though using rangeland and water sources for pastoralist between the two sides of international borders is common, the practice facilitated by traditional leaders across borders and customary law usually shared same clan or tribe; there is a trend of some incidence in the process. these includes introduction of new disease, perceived by host or real degradation of rangeland and water resources by the community coming from other side of the border and sometimes this also involves looting of livestock resources. So, enhancing the environmental and social benefit of DRSLP II, IGAD shall introduce regional initiatives on IGAD clusters for cross border vaccination, conflict management including celebrating customary laws and seasonal community leaders' gatherings, cross border security committee and establishing customs at borders to facilitate economic regional integration.

4. Legal, Policy and Regulatory Framework

4.1. Regional AfDB and IGAD Policy and Administrative Framework

4.1.1. African Development Bank Group's: Integrated Safeguards System¹

The African Development Bank Group (ADBG) Integrated Safeguards System (ISS) are tools used for identifying risks, reducing development costs and improving project sustainability, accordingly promoting affected communities and helping to preserve the environment. ADBG-ISS equipped to address emerging environmental and social development challenges while encourages greater transparency and accountability. It advocates the voices of people who are affected by Bank-funded operations, especially the most vulnerable communities, by providing, project-level grievance and mitigation mechanisms by allowing the voices and concerns of affected people to be heard and addressed during project planning and implementation. The ADBG-ISS builds on the two previous bank safeguards, these are Involuntary Resettlement (2003) and Environment (2004) and on three cross-cutting policies and strategies: Gender (2001), the Climate Risk Management and Adaptation Strategy (2009) and the Civil Society Engagement Framework (2012). It also builds on the Bank's sector policies: Health (1996), Integrated Water Resources Management (2000), Agriculture and Rural Development (2000, 2010), and Poverty Reduction (2004).

The ADBG-ISS consists of four interrelated components:

1. **The Integrated Safeguards Policy Statement** –designed to be applied to the bank lending modalities, and it takes into account the various capacities and needs of regional member countries in both the public and private sectors. the policy statement founded on balance the trade-offs between short-term profits and long-term development and environmental sustainability in financing projects; strengthen regional member countries' (RMCS') institutional frameworks and governance to underpin environmental and social sustainability; strengthen the bank's compliance functions and units to ensure that mandatory and special environmental and social compliance monitoring and audit missions are fully implemented when the integrated safeguards system (ISS) is rolled out; mobilize more financial resources to ensure the environmental and social sustainability of its investments and increase access to funding for civil society groups, as reliable and independent third parties, to support supervision and monitoring of projects; participate with borrowers in supervising and monitoring compliance with environmental and social policies during project implementation; and strengthen the capacity of RMCS' country systems to implement the bank's environmental and social requirements.

2. **Operational Safeguards (OSs)** - are a set of five safeguard requirements that Bank clients are expected to meet when addressing social and environmental impacts and risks. Bank staff use due diligence, review and supervision to ensure that clients comply with these requirements during project preparation and implementation. OS1 sets out the Bank's overarching requirements for borrowers or clients to identify, assess, and manage the potential environmental and social risks and impacts of a project, including climate change issues. OSs 2-5 support the implementation of OS1 and set out specific requirements

¹ Source : (ADBG-ISS)(Group, 2013)

relating to different environmental and social issues that are triggered if the assessment process reveals that the project may present certain risks.

3. Environmental and Social Assessment Procedures (ESAPs) – provide guidance on the specific procedures that the Bank and its borrowers or clients should follow to ensure that Bank operations meet the requirements of the OSs at each stage of the Bank’s project cycle.

4. Integrated Environmental and Social Impact Assessment (IESIA) – Guidance Notes provide technical guidance to the Bank’s borrowers or clients on standards on sector issues, such as roads and railways, hydropower, fisheries, and methodological approaches clients or borrowers are expected to adopt to meet OS standards.

4.1.1.1. Operational Safeguards 1: Environmental and Social Assessment

OS 1 governs the process of determining a project’s environmental and social category and the resulting environmental and social assessment requirements: the scope of application; categorization; Environmental and Social Management Plans; climate change vulnerability assessment; public consultation; community impacts; appraisal and treatment of vulnerable groups; and grievance procedures

These OS mainstream environmental, climate change, and social considerations into Country Strategy Papers (CSPs) and Regional Integration Strategy Papers (RISPs); identify and assess the environmental and social impacts and risks including those related to gender, climate change and vulnerability of the Bank lending and grant-financed operations in their areas of influence. The assessment covers, in an integrated way, all relevant direct and indirect environmental and social risks and impacts, including those specifically covered in OSs 2-5. Potential impacts include physical (e.g., geology and soils, surface and groundwater resources, air resources and climate, noise and vibration, prominent vista and aesthetic features), biological (e.g., flora, resident and migratory fauna, ecosystems, endangered and threatened species and their habitats and protected areas, poaching), socioeconomic and cultural (e.g., livelihood, resettlement, community social structure, gender, vulnerable groups, health, safety, cultural property, ecosystem services), and trans boundary and global impacts, including greenhouse gas emissions and vulnerability to climate change effects. It discusses potential adaptation and mitigation measures. The assessment also covers possible cumulative impacts: impacts on areas and resources that result from the proposed project in addition to impacts from other existing or planned developments, including from any associated facilities, regardless of which entity undertakes those actions. Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time.

The assessment also considers real alternatives to the project’s location and/or design to avoid adverse impacts. And the mitigation strategies for reduce potential adverse impact if avoidance of the negative impact is not possible. To the extent possible, the assessment complies with the relevant legislation and standards applicable in the local jurisdiction, bearing in mind the equivalence of standards with those of the Bank, and it takes into consideration national or regional level programming documents (i.e., CSP or RISP) that are under implementation or in preparation. The Bank intends that the assessment process could support and strengthen existing country systems for environmental, climate, and social risk management, including those specifically related to OSs 2-5, such as systems and institutions covering resettlement, biodiversity protection, pollution control, and labor standards.

The OS required the client to take the assessment and the preparation of an Environmental and Social Management Plan (ESMP) in a manner that complies with existing country systems for assessing and managing environmental risk, as well as with the AfDB's requirements. The ESMP need to be prepared with a realistic timeframe, incorporating the necessary organizational capacity (including further training requirements) and financial resources to address and manage the environmental and social risks that may occur during the full project cycle. When a project component or exact location remains uncertain, an ESMP cannot be developed, but an Environmental and Social Management Framework (ESMF) is developed to guide the identification, preparation, and appraisal of components and activities.

This OS also guides the classification of sub-projects in to four categories based on their predicted impacts.

Category 1: Bank operations likely to cause significant environmental and social impacts. Category 1 projects are likely to induce significant and/or irreversible adverse environmental and/or social impacts, or to significantly affect environmental or social components that the Bank or the borrowing country considers sensitive. Some program-based operations or other regional and sector program loans that have significant adverse environmental or social risks and are deemed to be Category 1. Some projects could be included in Category 1 if potential cumulative impacts or the potential impacts of associated facilities brought significant negative impacts on the environment or the people. Any project requiring a Full Resettlement Action Plan (FRAP) under the provisions of the Bank's policy on involuntary resettlement is also deemed to be Category 1. Category 1 program-based operations or regional and sector loans require a SESA, and Category 1 investment projects require an ESIA, both leading to the preparation of an ESMP.

Category 2: Bank operations likely to cause less adverse environmental and social impacts than Category 1. Category 2 projects are likely to have detrimental site-specific environmental and/or social impacts that are less adverse than those of Category 1 projects. Likely impacts are few in number, site-specific, largely reversible, and readily minimized by applying appropriate management and mitigation measures or incorporating internationally recognized design criteria and standards. An operation that involves resettlement activity for which an Abbreviated Resettlement Action Plan (ARAP) is required under the ESAPs is classified as Category 2. Most program-based operations and regional or sector program loans designed to finance a set of subprojects approved and implemented by the borrower or client are included in this category unless the nature, scale or sensitivity of the intended pipeline of subprojects involves either a high level of environmental and social risk or no such risk. Category 2 projects require an appropriate level of environmental and social assessment (SESA for program operations, investment plans, and some corporate loans, or ESIA for investment projects) tailored to the expected environmental and social risk so that the borrower can prepare and implement an adequate ESMP (for an investment project) or ESMF (for a program operation), to manage the environmental and social risks of subprojects in compliance with the Bank's safeguards.

Category 3: Bank operations with negligible adverse environmental and social risks. Category 3 projects do not directly or indirectly affect the environment adversely and are unlikely to induce adverse social impacts. They do not require an environmental and social assessment. Beyond categorization, no action is required. Nonetheless, to design a Category 3 project properly, it may be necessary to carry out gender analyses, institutional analyses, or other studies on specific, critical social considerations to anticipate and manage unintended impacts on the affected communities.

Category 4: Bank operations involving lending to financial intermediaries. Projects involve Bank lending to financial intermediaries that on-lend or invest in subprojects that may produce adverse environmental and social impacts. Financial intermediaries include banks, insurance, reinsurance and leasing companies, microfinance providers, private equity funds and investment funds that use the Bank's funds to lend or provide equity finance to their clients. Financial intermediaries also include private or public sector companies that receive corporate loans or loans for investment plans from the Bank that are used to finance a set of subprojects. Financial intermediary subprojects equivalent to Category 1 and Category 2 are subject to the relevant OS requirements, as if they were directly financed Category 1 or Category 2 projects. However, if a client will use a Bank corporate loan to finance high-risk investment projects known at the time of loan approval, the loan can be considered Category 1.

4.1.1.2. Operational Safeguards 2: Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation

OS 2 consolidates the policy commitments and requirements set out in the Bank's policy on involuntary resettlement, and it incorporates refinements designed to improve the operational effectiveness of those requirements. OS 2 directs Bank-financed projects that cause involuntary resettlement of people must be displaced in a way they are treated fairly, equitably, and in a socially and culturally sensitive manner; that they receive compensation and resettlement assistance so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved; and that they share in the benefits of the project that involves their resettlement. The OS defined the term resettlement refers to both physical and economic displacement. Resettlement is considered involuntary when the project-affected people are not in a position to refuse the activities that result in their physical or economic displacement. This occurs in cases of lawful expropriation or temporary or permanent restrictions on land use, and in negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

This OS aims to assist borrowers or clients, with support from relevant Bank staff, in addressing the potential costs and risks associated with involuntary resettlement and, in doing so, to facilitate sustainable development. Specific objectives of this OS are to avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been explored; and ensure that displaced people are meaningfully consulted and given opportunities to participate in the planning and implementation of resettlement programs. The OS directs that displaced people shall receive proportional resettlement assistance under

the project, so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels.

The OS requires the borrower or client prepares a Full Resettlement Action Plan (FRAP) for (i) any project that involves 200 or more persons (as defined by the involuntary resettlement policy), or (ii) any project that is likely to have adverse effects on vulnerable groups. For any project in which the number of people to be displaced is fewer than 200 people and land acquisition and potential displacement and disruption of livelihoods are less significant, the borrower or client prepares an Abbreviated Resettlement Action Plan (ARAP).

This OS guides that affected people are need to be compensated for all their losses at full replacement costs before their actual move; before land and related assets are taken; and, if the project is implemented in phases, before project activities begin for each particular phase. The borrower or client gives preference to land-based resettlement strategies and as a matter of priority offers land-to-land compensation and/or compensation-in-kind in lieu of cash compensation where feasible; and the borrower or client shall clearly explain to affected people that cash compensation very often leads to rapid impoverishment. This OS also remind that total cost of the project shall include the full cost of all resettlement activities, factoring in the loss of livelihood and earning potential among the affected population. The calculation of the “total economic cost” also factors in the social, health, environmental and psychological impacts of the project and the displacement, which may disrupt productivity and social cohesion. The resettlement costs are treated against the economic benefits of the project, and any net benefits to the affected population are added to the benefit stream of the project.

4.1.1.3. Operational Safeguards 3: Biodiversity, Renewable Resources and Ecosystem Services

OS-3 guides how to conserve biological diversity and promote the sustainable use of natural resources. It translates into OS requirements the Bank’s commitments in its policy on integrated water resources management and the UN Convention on Biological Diversity. It has outlined the requirements for borrowers or clients to (i) identify and implement opportunities to conserve and sustainably use biodiversity and natural habitats, and (ii) observe, implement, and respond to requirements for the conservation and sustainable management of priority ecosystem services. This operational safeguard reflects the objectives of the Convention on Biological Diversity to conserve biological diversity and promote the sustainable management and use of natural resources. It also aligns with the Ramsar Convention on Wetlands, the Convention on the Conservation of Migratory Species of Wild Animals, the Convention on International Trade in Endangered Species of Wild Flora and Fauna, the World Heritage Convention, the UN Convention to Combat Desertification and the Millennium Ecosystem Assessment. Its recommendations also align with the International Plant Protection Convention, which covers the movement of invasive alien species, pests and pest risk analysis for quarantine pests, including analysis of environmental risks and living modified organisms.

this OS's objective are to conserve biological diversity and ecosystem integrity by avoiding or, if avoidance is not possible, reducing and minimizing potentially harmful impacts on biodiversity; endeavor to reinstate or restore biodiversity, including, where some impacts are unavoidable, through implementing biodiversity offsets to achieve "not net loss but net gain" of biodiversity; protect natural, modified, and critical habitats; and sustain the availability and productivity of priority ecosystem services to maintain benefits to the affected communities and sustain project performance. OS specifically applies to bank operations that: are located in any type of habitat; areas providing ecosystem services upon which potentially affected stakeholders are dependent for survival, sustenance, livelihood or primary income, or which are used for sustaining the project; extract renewable natural resources as a main purpose (e.g., plantation forestry, commercial harvesting, agriculture, livestock, fisheries and aquaculture); or involve the use and commercialization of an indigenous knowledge system. the OS give special attention to the major threats to biodiversity and ecosystem services, such as pollution and contamination, land conversion, habitat fragmentation, natural habitat loss, deforestation, over-exploitation of natural areas and resources, invasive alien species, migration barriers, the capturing of wild animals, the harvesting of endemic species and indigenous ornamental flora and fauna, and wildlife poaching.

4.1.1.4. Operational Safeguards 4: Pollution Prevention and Control, Hazardous Materials and Resource Efficiency

OS's-4 covers the range of key impacts of pollution, waste, and hazardous materials for which there are agreed international conventions, as well as comprehensive industry-specific and regional standards. It guides the main pollution prevention and control requirements for borrowers or clients to achieve good environmental performance and sustainable use of natural resources, over the life of a project. This OS draws on and aligns Bank operations with existing international conventions and standards related to pollution, hazardous materials and waste, and related issues. It also requires compliance with internationally accepted environmental standards, particularly the World Bank Group Environmental Health and Safety (EHS) Guidelines.

It requires the borrower or client applies pollution prevention and control measures consistent with national legislation and standards, applicable international conventions, and internationally recognized standards and good practice, particularly the EHS Guidelines. It prevents to discharge of pollutants into the air, surface water and groundwater, land and soil during planned activities as well as unplanned events or emergencies that may result in local, regional, and trans boundary impacts.

If total prevention is not feasible, the borrower or client shall take specific actions to reduce or minimize the effluents or volume of discharges. Projects shall avoid or, where avoidance is not possible, controls and reduces the generation of hazardous and non-hazardous waste at source, in compliance with applicable international conventions. If waste cannot be recovered or reduced, the borrower or client adopts treatment measures and environmentally sound disposal practices. If significant production, use or generation of hazardous materials or waste cannot be avoided, the borrower or client, in consultation with potentially affected workers and communities has to prepares a management plan in the framework

of a lifecycle assessment (transport, handling, storage, recycling and disposal), incorporating management and reporting practices and including preventive and contingency measures.

For projects that involve the use of pesticides, the borrower or client assesses the need for and, if appropriate, plans and implements an integrated pest management and/or an integrated vector management program for pest-management activities for the full lifecycle of the project. The integrated pest or vector management program should involve pest-control methods, including cultural practices, biological control, genetic control and, as a last resort, chemical means. If pesticides are used for pest control, the borrower or client selects only low-toxicity pesticides that do not pose a threat to human health or the environment, and that will not affect natural pest enemies. The borrower or client manages and disposes of pesticides in accordance with good international industry practice, such as the Food and Agriculture Organization (FAO) International Code of Conduct on the Distribution and Use of Pesticides.

4.1.1.5. Operational Safeguards 5: Labor Conditions, Health and Safety

OS's-5 establishes the Bank's requirements for concerning workers' conditions, rights and protection from abuse or exploitation. It covers working conditions, workers' organizations, occupational health and safety, and avoidance of child or forced labor. It outlines the main requirements for borrowers or clients to protect the rights of workers and provide for their basic needs.

It aims to: Protect workers' rights; establish, maintain, and improve the employee–employer relationship; Promote compliance with national legal requirements and provide supplemental due diligence requirements where national laws are silent or inconsistent with the OS; align Bank requirements with the ILO Core Labor Standards, and the UNICEF Convention on the Rights of the Child, where national laws do not provide equivalent protection; Protect the workforce from inequality, social exclusion, child labor, and forced labor; and Establish requirements to provide safe and healthy working conditions. This OS requires the borrower or client intends to employ a workforce for a project to develop and implements a human resources policy and procedures appropriate to the nature and size of the project, with the scale of the workforce in alignment with this OS and with applicable national laws.

The borrower or client is not exercised to employ forced labor, any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. The borrower or client does not employ trafficked persons. Women and children are particularly vulnerable to trafficking. The borrower or client provides the workers with a safe and healthy work environment, taking into account risks inherent in the particular sector and specific classes of hazards in the borrower's or client's work areas—including physical, chemical, biological, and radiological hazards.

The OS's -5 guides to borrower or client to adopt or includes a health, safety and environmental program that includes plans or procedures to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work. Providing appropriate equipment to minimize risks, and requiring and

enforcing its use; Training workers and providing appropriate incentives for them to use and comply with health and safety procedures and protective equipment; documenting and reporting on occupational accidents, diseases and incidents; and developing emergency prevention, preparedness and response arrangements.

4.1.2. AfDB Environmental and Social Assessment Procedures

The ESAP describe how the Bank and its borrowers should work together to ensure that environmental, climate change and social considerations are integrated into the Project Cycle from Country Programming to Post Completion. The Environmental and Social Assessment process outlined in the ESAP provides a way to improve a project environmentally, socially and in relation to climate change, thereby enhancing its benefits and in order of priority avoiding, minimizing, mitigating or compensating for adverse impacts. ESAP help to avoid incurring costs and implementation delays as a result of unanticipated problems. It will also reduce the need for project conditionality as measures can be taken in advance, can be incorporated into project design or project alternatives can be considered.

In addition to the requirements set out in the OSs, Bank-financed projects must comply with Regional Member Country (RMC) environmental and social legislation and regulations, with national and subnational requirements for public consultations and disclosure and with any international agreements ratified by the borrowing country. Bank-financed projects that will potentially affect several countries such as international or trans-boundary projects must comply with the laws, policies and guidelines in place in the countries potentially affected.

Social Context includes description of the country socio-economic and cultural profile, identifying any key issues relating to disadvantaged or vulnerable groups in the population. Identification of issues relating to conflict, migration, employment and livelihoods. The decision to allocate a project to a Category should be made using information available at the time of project identification. It will be made based on professional judgment based on what is known about the following:

- The type and scale of the project.
- The project's location and the presence of sensitive environmental or social components.
- The scale of the likely impact on environmental or social components, whether it can be minimized or mitigated and whether it would be irreversible.
- The significance, sensitivity and value of the environmental component or the social issue likely to be affected.
- The risk of specific Operational Safeguard requirements being triggered.
- The project's vulnerability to climate change effects.

The potential impacts will be screened taking account of the project's "area of influence". The area of influence should be determined using professional judgment and should include:

- The area likely to be affected by the project itself and its various components (such as pipelines, transmission corridors, access roads or waste disposal sites).
- The area likely to be affected by associated facilities not funded by the project which would not have been constructed if the project did not exist or would not be viable without the project.

- The areas and the communities that are likely to be affected by unplanned but predictable developments caused or induced by the project.

SESA and ESIA are served as instruments used to identify, predict and assess the likely environmental and social consequences of proposed development activities, in order to ascertain the means through which to avoid, minimize, mitigate, compensate /offset and/ or monitor adverse impacts, and increase development benefits.

The main difference between a SESA and an ESIA is that the former is applied to Program-Based Operations, such as budget support, sector reform and regional and sector program loans or investment plans. These have a broader, upstream and more long-term strategic perspective. The latter (ESIA) is applied to downstream site-specific projects that have a relatively shorter time scale.

An ESIA assesses the direct, indirect and cumulative impacts of a project in its area of influence, examines project alternatives and determines the significance of each of the impacts identified. The ESIA should identify ways of improving project selection, design, siting and implementation in order to avoid or mitigate and manage adverse environmental and social impacts.

An ESIA should address the natural environment, human health and safety, social impacts including the risks to vulnerable groups, involuntary resettlement, cultural resources and vulnerability to climate change. An ESMP is a plan which describes the actions that will be taken by the borrower to enhance positive impacts and to avoid, minimize, mitigate, compensate / offset negative impacts. The ESMP is also used monitor identified environmental and social impacts of development activities. An ESMP should describe the mitigation and management measures, clarify responsibilities for implementation, provide an implementation plan with the necessary time schedule and costs and indicate how environmental and social monitoring measures are to be implemented.

4.1.3. AfDB Eastern Africa Regional Integration Strategy Paper²

Eastern Africa Regional Integration Strategy Paper (EA RISP) articulates strategic priorities and a corresponding indicative Operational program for the Bank's support to regional economic integration in Eastern Africa, prepared in the larger context of the Bank's strategic direction and recent regional, continental and global developments. These developments include the adoption, in 2015, of the Sustainable Development Goals (SDGs), the African Union (AU) Agenda 2063, the Tripartite Free Trade Area (TFTA), and the Continental Free Trade Area (CFTA).

The current EA RISP builds on the thrusts and orientation of the previous RISP (2011-2016) whose strategic pillars were Regional Infrastructure and Capacity Building. While implementing the previous RISP, the Bank has left a strong footprint in terms of financing regional integration in the Region. Now EA RISP put emphasis for the design of the Bank's new regional infrastructure projects in a way to have a greater gender-oriented focus; by mandating gender mapping in every new project and involving

² Source: 2018-2022 (EA RISP)(AfDB, 2016b)

systematic gender analysis during the preparation of each new operation. Specific components targeting women and youth to be included in every project design. Gender and age disaggregated indicators will be integrated in project Results-Based Frameworks. The projects will also seek to support social facilities along the corridors tailored to meet the needs of female cross-border traders.

4.1.4. Federal Democratic Republic of Ethiopia Country Strategy Paper (2016-2020)³

Federal Democratic Republic of Ethiopia: Country Strategy Paper (ADB-CSP) took lessons from previous bank activities in Ethiopia including building past successes in the areas of infrastructure and governance and remaining selective with a focus on fewer, but big transformative interventions; continuous flexibility in responding to the country's emerging needs; the continuous building of implementing agencies' capacity to ensure effective program implementation; dedication of adequate resources to knowledge products as these contribute to business development and evidence-based policy dialogue; formulating a robust results framework accompanied by strong project monitoring and evaluation and credible baseline data, and continuous dialogue with the government of Ethiopia (GoE) in setting realistic targets to ensure their achievability, and to improve the business climate, deepen the financial sector and promote regional integration.

the Bank's engagement with the GoE in 2016–20 planned to be guided by following key principles: (i) aligning with the GTP II, the overarching goal of which is economic transformation through agro-based industrialization driven largely by light manufacturing; (ii) selectivity in the choice of intervention focus areas, guided by the Bank's Ten Year Strategy 2013-2022 (TYS), with emphasis on the High Fives⁴; (iii) embedding lessons learnt and sustaining results achieved under previous Bank strategies; (iv) seeking complementarity and synergies with other development programs (DPs) ; (v) focusing on the Bank's comparative advantages, and; (vi) championing green and inclusive growth, gender empowerment and private sector development. The Bank will continue to focus on infrastructure and governance in Ethiopia mainly because there are huge infrastructure and governance deficits. The two focus areas have strong linkage with agriculture, industry and poverty reduction. Focusing on infrastructure and governance is also consistent with Bank's principle of selectivity, Bank's TYS, the Bank's High Fives and the Regional Integration Strategy Paper.

4.1.5. Drought Disaster Resilience and Sustainability Initiative (IDDRSI) Strategy⁵

The IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) aimed at building the resilience of vulnerable communities to the effects of recurrent droughts and achieving simultaneous growth and sustainable development in the IGAD region. This initiative was launched in 2013 as a regional undertaking, following a collective decision to end drought emergencies, which was made by a Summit of

³ Source: (AfDB, 2016a)

⁴ High Fives are the five development priorities of Africa development bank , these are 1) light up and power Africa 2) feed Africa 3) industrialize Africa 4) integrate Africa 5) improve the quality of life for the people of Africa

⁵ Source: (IGAD, 2019)

the Heads of State and Government from countries in the Horn of Africa region, Development Partners and other stakeholders, which was held in Nairobi in September 2011⁶. The IDDRSI Strategy was developed as a 15 year proposition for implementation in three 5-year phases, with a design feature of a review at the end of each phase to assess the status, relevance and effectiveness of implementation and inform prescriptions for subsequent phases.

IDDRSI requires that interventions against drought and related emergencies employ approaches that are pre-emptive, rather than reactive, holistic rather than independent, long- term instead of short-term and combining relief with development interventions. Cross-border cooperation is one of the features of IDDRSI.

IDDRSI Eight Priority Intervention Areas (PIAs)

PIA (1): Natural Resources and Environmental Management

PIA (2): Market Access, Trade and Financial Services

PIA (3): Enhanced Production and Livelihoods Diversification

PIA (4): Disaster Risk Management

PIA (5): Research, Knowledge Management and Technology Transfer

PIA (6): Peace Building, Conflict Prevention and Resolution

PIA (7): Coordination, Institutional Strengthening and Partnerships

PIA (8): Human Capital, Gender and Social Development

The IDDRSI Strategy recognizes that to harness the full potential of a growing population whose majority is aged under 18 years, requires building skills, creating jobs and providing equal opportunities as well as comprehensive arrangements for human capital development. IDDRSI strategy further acknowledges the dynamics of the mobility dimension in the region and therefore seeks to harness the development potential of safe, orderly and regular mobility as well as promote migration as an adaptation strategy for mitigation against natural disasters and climate related displacement risks. In consideration of the recommendations made during the exercise to mainstream gender into the IDDRSI Strategy (2013 – 2017) and related CPPs, the current IDDRSI Strategy has upgraded gender from a cross-cutting issue, as it was in the previous strategy, to a substantive component integrated within IDDRSI interventions to ensure that responses to the priority needs of women and men are met; and there is awareness of what benefits or adverse effects could impact either.

4.2. National Policy, Legal and Administrative Framework

Ethiopia has issued various strategic and institutional frameworks to be applied in the effort to manage the environment; it ranges from the supreme law of the country, the constitution, to various specific environmental standards. Whereas the institutional arrangements extended from the federal to the local levels.

⁶ IDDRSI was conceived as a regional initiative to drive a regional agenda for developing and harmonizing policies, strategies and systems throughout the IGAD region, involving efforts aimed at ending drought emergencies, based on the understanding, as stated by the September 2011 Summit, that “droughts need not, and should not, lead to famine and other disasters, in the region.

4.2.1. The Constitution of the Federal Democratic Republic of Ethiopia⁷

The Constitution of Federal Democratic Republic of Ethiopia (FDRE-Con) adopted in 1995 provides general framework for environmental and social safeguards in Ethiopia, it has developed with number of basic and comprehensive principles that consider environmental safety, social protection and management in the country including the sustainable development. Some of the articles of the Ethiopian constitution relevant to environmental and social safeguards are:

Article 10: Human and democratic rights of citizens and peoples shall be respected.

Article 14: Every person has inviolable and inalienable right to life, security of person and liberty.

Article 16: Everyone has the right to protection against any potential bodily harm.

Article 24: Everyone has the right to respect for his human dignity, reputation and honor.

Article 35: Taking in accounts of inequality and discrimination of women, they are entitled to affirmative measures. Women have the right to full consultation in the formulation of national development policies, the designing and execution of projects, and particularly in the case of projects affecting the interests of women.

Article 40: The right to ownership of rural and urban land, as well as of all-natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands.

Article 41: Every Ethiopian national has the right to equal access to publicly funded social services. The State shall pursue policies which aim to expand job opportunities for the unemployed and the poor and shall accordingly undertake programs and public works projects.

Article 42: Factory and service workers, farmers, farm laborers, other rural workers and government employees whose work compatibility allows for it and who are below a certain level of responsibility, have the right to form associations to improve their conditions of employment and economic well-being. Women workers have the right to equal pay for equal work.

Article 43: The Peoples have the right to participate in national development and to be consulted with respect to policies and projects affecting their community.

Article 44: All persons have the right to a clean and healthy environment. All persons who have been displaced or whose livelihoods have been adversely affected have right to commensurate.

Article 89: Government shall ensure the participation of women in equality with men in all economic and social development endeavors. Government shall endeavor to protect and promote the health, welfare and living standards of the working population of the country.

Article 90: Policies shall aim to provide all Ethiopians access to public health and education, clean water, housing, food and social security.

Article 91: Government and citizens shall have the duty to protect the country's natural endowment, historical sites and objects. Government shall have the duty, to the extent of resources permit, to support the development of the arts, science and technology.

⁷ Source: (EFDRE, 1994)

Article 92: Government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment. People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies and projects that affect them directly.

4.2.2. Ten Years Perspective Development Plan (2021 – 2030)

Ethiopia 2030: The Pathway to Prosperity is the new ten Years Perspective Development Plan from 2021 to 2030. It has planned to raise per capital income to 1,115 USD by 2022; 2,220 USD by 2030 and reduce the proportion of people living below the poverty line to 7% by 2030. The plan took the baseline level for proportion of people living below poverty as 19% (2020). Previous development plans of Ethiopia have contributed for the huge reduction in the poverty line which was 44%, previous plans including the recently concluded the two phase's 10-year growth and transformation plan. The new ten-year plan give emphasis on quality of economic growth, participation and coordination of sectors in the planning process, sectoral linkages and multi-sectoral development focus, Preparation of national development corridors based on development potentials, focus on solving institutional bottlenecks, home-grown economic reform program, and resilience building, innovation and entrepreneurship.

Equitable participation of women and children involves ensure gender equity in economic and social sectors both in participation of women at all levels of education and asset ownership of women, ensure fair participation of women and youth in leadership and decision-making positions, and create awareness among citizens about the role of women and youth in the country's overall development.

The focus area for making climate resilient green economy involves Increase basin development efforts to fight land degradation and to reduce pollutions, improve productivity and reduce GHG emissions, increase forest protection and development, increase production of electricity from renewable sources for domestic use and for export, and focus on modern and energy saving technologies.

The thematic priority area in the new 10-year plans are creating strong social security system, strong and market led public private partnership, fight degradation and pollution, energy saving and renewable modern technologies, livestock feeds and health.

4.2.3. FDRE: National Social Protection Strategy of Ethiopia⁸

The policy identified five integrated focus areas as strategic directions. These are: (1) **Productive Safety Nets:** support poor and vulnerable households with cash or food transfers with participating the targeted households with natural resource rehabilitation interventions, the productive safety net aim is to increase consumption of food, access essential services, and to make productive investments of natural resource management. (2) **Livelihoods and Employment Support:** targets poor households with demand oriented technical and financial support and/or information on employment opportunities, to enable them improve their on-farm and off-farm livelihood activities. (3) **Social Insurance:** expansion of mandatory

⁸ Source: (MoLSA, 2016)

insurance for formal sector workers and innovative insurance products for the rural poor and urban informal workers will enable people to better manage the risks they face. (4) **Access to Health, Education and Other Social Services**, and (5) **Addressing Violence, Abuse and Exploitation**.

4.2.4. Pastoral Development Policy and Strategy

Earlier Ethiopia's pastoral policy-making process in the 1960s was focused to bring conflict-ridden, remote, and inaccessible areas into the mainstream of Ethiopian politics. While recent efforts in pastoralist policy development in Ethiopia attempt to integrate with continental and regional initiatives, such as the African Union (AU) Policy Framework for Pastoralism in Africa and the Inter-Governmental Authority for Development (IGAD) Drought Disaster Resilience and Sustainability Initiative (IDDRSI) (Gebremeskel et al., 2019). GoE level of emphasis and direction of focus with respect to pastoralism and pastoral and agro-pastoral (PAP) development can be discerned from core high-level policy documents such as the PRSP; SDPRP; PASDEP; GTP I & II; and LMP (Gebremeskel et al., 2019).

4.2.5. Rural Development Policies and Strategies (RDPS)

The government policy document "Rural Development Policies, Strategies and Instruments," published in 2001, broadly underlines that development interventions in pastoral areas shall be based on both short and long-term strategies. In the short run "since the livelihood of the people is based on pastoralism, the development endeavor and activities must be based on pastoralism itself. While the long-term strategy is on mobilizing investments and resources to make the pastoralism, livelihood based on sedentary economic activity via the development of irrigation schemes and introduction of improved agricultural practices and packages. The strategy, therefore, envisages the preparation and implementation of a comprehensive settlement program focused on step-by-step pastoralist settlement activities, and extensive training of traditional herders in the methods of the settled farming system.

4.2.6. Biodiversity Conservation and Research Policy

The biodiversity policy of Ethiopia adopted in 1998 provides policy guidance towards the effective conservation, rational development and sustainable utilization of the country's biodiversity. The policy objectives include public participation in biodiversity conservation, development and utilization, and also ensure that communities share from utilization of the genetic resources and their traditional knowledge. The policy consists of comprehensive provisions on the conservation and sustainable utilization of biodiversity, and it underlines the requirements for implementers to adopt during planning and operational phase of projects and for those projects engaged in biological resource utilization to follow ESIA procedures.

4.2.7. Environmental Impact Assessment of Ethiopia Proclamation No. 299-2002⁹

As part of the Ethiopia environmental policy instruments, The Ethiopian government Environmental Impact Assessment (EIA) (Proclamation No 299 of 2002¹⁰) adopted in 2002. The proclamation developed in consisted with the international conventions and many of the principles and provisions Ethiopia has

⁹ Source - (FDRE, 2002)

¹⁰ Source - (FDRE, 2002)

ratified. These included: Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, Done at Aarhus, Denmark, On 25 June 1998 ; Cartagena Protocol on Bio-Safety to the Convention on Biological Diversity ;Convention on Biological Diversity, Rio, 5 June 1992;Kyoto Protocol to the United Nations Framework Convention on Climate Change; United Nations Convention to Combat Desertification ;UN Framework Convention on Climate Change and Convention for the Protection of the World Cultural and Natural Heritage Paris, 23 November 1972.

The Proclamation requires an EIA for any planned development project or public policy which is likely to have a negative impact on the environment. With regard to development projects, the proclamation stipulates that no person shall commence implementation of a proposed project

EIA directs that projects should be assessed on the basis of the size, location, nature, cumulative effect with other concurrent impacts or phenomena, trans-regional effect, duration, reversibility or irreversibility or other related effects of the project. An environmental impact study shall incorporate the content and amount of pollutant; Source and amount of energy required for operation; Information on likely trans-regional impacts; Characteristics and duration of direct or indirect, positive or negative impacts; Measures proposed to eliminate, minimize, or mitigate negative impacts; Contingency plan in case of accident; and Procedures of self-auditing and monitoring during implementation and operation.

Environmental impact study report shall include a brief statement summarizing the study in non-technical terms. After the report received by the relevant federal or regional environmental agency within 15 working days shall, (a) approve the project without conditions and issue authorization if it is convinced that the project will not cause negative impacts; (b) approve the project and issue authorization with conditions that must be fulfilled in order to eliminate or reduce adverse impacts, if it is convinced that the negative impacts can be effectively countered, or (c) refuse implementation of the project if it is convinced that the negative impact cannot be satisfactorily avoided. The proclamation also directs the environmental protection authority or the relevant regional environmental agency to monitor the implementation of an authorized project in order to evaluate compliance with all commitments made by, and obligations imposed on the project during authorization.

4.2.8. Environmental Impact Assessment and ESMP Guideline

The Environmental Impact Assessment guideline provides a background to environmental impact assessment and environmental management in Ethiopia. The document aims at be used as reference material to ensure effective environmental assessment and management practice in Ethiopia. The document details the required procedures for conducting an EIA in Ethiopia and the requirements for environmental management.

The Guideline document underlined the principles of early application, participation, issues based, alternatives and accountability to achieve the EIA objectives. It necessitates the participation of all interested and affected parties in the EIA process. It considers all feasible alternatives which may include different methods of undertaking a development, alternative sites, alternative sources of raw materials

and this includes the “no-go” option as feasible alternative need to be analysis for project who have significant negative impacts observed.

The guideline also indicates the importance of regular internal audits of the environmental performance of the operation and the compliance monitoring. The auditing and monitoring results may be prepared in the form of an Environmental Performance Report which should describe the extent to which the organization has complied with its environmental requirements.

The Environmental Assessment Guideline documents provide for EIA in specific development sectors in the country (agriculture, industry, transport, tannery, dams and reservoirs, mining, textiles, irrigation, hydropower and resettlement projects).

- Environmental and Social Impact Assessment Guidelines for Dams and Reservoirs, 2004
- Environmental Impact Assessment Guideline for Fertilizer, 2004
- Guidelines for Social, Environmental and Ecological Impact Assessment and Environmental Hygiene in Settlement Areas, 2004
- Environmental Impact Assessment Guidelines on Irrigation, 2004
- Integrated Environmental and Social Impact Assessment Guidelines for Livestock and Rangeland Management, 2004
- Environmental Impact Assessment Guideline for Mineral and Petroleum Operation Projects, December 2003
- Environmental Impact Assessment Guideline on Pesticides May 2004
- Environmental Impact Assessment Guidelines on Road and Railway, 2004
- Environmental Impact Assessment Guidelines on Forestry, 2004

The Environmental and Social Management Plan (ESMP) Guideline provides the essential components to be covered in any environmental management plan (e.g., identified impacts, mitigation measures, monitoring, capacity building,) and structured formats for mitigation measures, monitoring and institutional arrangements.

4.2.9. Environmental Impact Assessment Procedural Guideline

The document identifies lists of resources for its environmentally sensitive ecosystems , these includes: Areas prone to natural disasters (geological hazards, floods rain storms, earthquakes, landslides, volcanic activity, etc.), Wetlands, Wetlands, Areas susceptible to erosion, Areas of importance to threatened cultural groups, Areas of importance to threatened cultural groups, Areas of unique socio-cultural history archaeological, or scientific importance areas with potential tourist value, Polluted area, Areas subject to desertification and bush fires, Coastal areas and Marine ecosystems, Areas declared as National parks, Watershed reserves, forest reserves, wildlife reserves and sanctuaries, sacred areas, wildlife corridors, hot - spring areas, Mountainous, water catchments and recharge areas of aquifers, Areas classified as prime agricultural lands or range lands, Green belts or public open spaces in urban areas, Burial sites and graves.

Environmental Impact Assessment Procedural Guideline highlights checklists as potential adverse impacts of concern during screening and categorising , including Socio-economic impacts, degradation of land and

aquatic environments, water Pollution, air pollution, noise and/or vibration, alterations to ecological processes, effects on cultural, religious, historic, archaeological and scientific resources, climate, especially the hydrological cycle and Impacts on human health.

The Ethiopian guideline used as reference to identify the category of the projects by using the criteria under each of the project categories schedules 1, 2& 3 as follows.

Table 7: Summary Ethiopian EIA guide line to identify category

Schedule 1. Projects which may have adverse and significant environmental impacts, and may, therefore, require full EIA	Schedule 2. Projects whose type, scale or other relevant characteristics have potential to cause some significant environmental impacts but not likely to warrant an environmental impact study.	Schedule 3. Projects which would have no impact and does not require environmental impact assessment
<ul style="list-style-type: none"> • Construction of dams, impounding reservoirs with a surface area of 100 hectares • Ground water development for supply of greater than 4000 m³ /day • Large scale Land reclamation / Projects necessitating the resettlement of 100 families or more • Development of agriculture covering an area of 500 hectares that involves change in land use • Use of new pesticide or fertilizer didn't recognized by the concerned government body • large scale Agricultural mechanization • Introduction of new breed, species of crops, seeds or animals • manmade lakes and artificial enlargement of lakes with surface area of 250 hectares or more • Surface water fed irrigation projects covering more than 100 hectares • Ground water fed irrigation projects more than 100 hectares • River diversions and water transfers between catchment • Drainage area of Forestry wetlands or 	<ul style="list-style-type: none"> • Wide spread introduction of fertilizers • Large scale Pest control programs • Surface water fed irrigation projects covering less than 100 hectares • Ground water fed irrigation projects covering less than 100 hectares • Large scale Productive forest reserves • Intensive rearing of cattle (>50 heads); pigs (>100 heads); or poultry (>500 heads) • Large scale establishment of animal feed • Large scale livestock fattening projects • Large scale bee keeping projects • Large scale artesian fisheries • Introduction of large-scale fish harvesting technology • Agro-industries, including 	<ul style="list-style-type: none"> • Building of small-scale educational facilities • Building of small-scale teaching or training facilities and equipment • Building of small-scale medical Centre • Medical supplies and equipment • Nutrition and Family planning activities • Surface water fed irrigation projects covering less than 50 hectares • Ground water fed irrigation projects covering less than 50 hectares • All small-scale agricultural activities • Protected forest reserves (small scale) • Rearing of cattle (<50 heads); pigs (<100 heads), or poultry (<500 heads) – • Livestock fattening projects (small scale) • small scale Bees keeping

wildlife habitat covering an area of 10 hectares or more Large scale open range rearing of livestock in Urban area <ul style="list-style-type: none"> • Large scale slaughter house construction • Large scale commercial fisheries farm • Introduction of exotic fish species 	manufacturing of vegetable and animal oils and fats <ul style="list-style-type: none"> • Manufacture, packing and canning of animal, fish and vegetable products • Small scale Industries utilizing hazardous materials 	projects <ul style="list-style-type: none"> • small scale Artesian fisheries • small scale Agro industrial • All trades except trade in endangered species and hazardous material • Assistance to refugee returned and displaced person
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Source: eia_procedura_guidelines_series_1_2003

4.2.10. Land Tenure Proclamation and Regulation

Rural Land Administration and use proclamation of 2005 (Proclamation No 456/2005, FDRE, 2005) aim to conserve and develop natural resources in rural areas through promoting sustainable land use practices with instruments introduced, Rural Land Holding Certificate, provides a level of security of tenure and as one of a measure to encourage farmers and pastoralists to implement measures to guard against soil erosion. Regional governments have an obligation to establish a competent organization to implement the rural land administration and land use law. The Proclamation states that if a land, that has already been registered, is to be acquired for public works or for investment, compensation commensurate with the improvements made to the land shall be paid to the land use holder or substitute land shall be offered. The Proclamation also imposes restrictions on the use of various categories of land, for example wetland areas, steep slopes, land dissected by gullies, etc.

Regional Environmental Protection Agency is responsible for rural land administration and with counselor of minister proclamation of 455/2005, the regional states have crafted their own regulation and compensation for land and other property; have formulated their land policies and land laws. Among these land laws and policies of the regional states: Oromia Region proclamation 130/2007, and SNNP Region 110/2007, Afar Region 49/2009 and Somali Regional State 128/2013 are the latest and effect legal framework for the land associated issue at the regional level (MoP, 2019a).

Because of the continuous increase in the value of land, continuous inflations, and living standard, the government revises the proclamation of (Proc No. 455/ 2005) with Expropriation of Land Holdings for Public Purposes and payment of Compensation and Resettlement (Proclamation No. 1161/2019).

FDRE Council of Ministers Regulation (regulation 135/2007) adopted for the purpose of payment of compensation for property situated on land holdings expropriated for public purposes and to assist the affected persons to restore their livelihood. The regulation sets the methods for the assessment of compensation, provision of land for land replacement and payment for the different types of assets.

National Invasive Alien Species Management Strategy and Action Plan (ET-IASMSAP 2021-2030) of Environment, Forest and Climate Change Commission March 2021 Addis Ababa, Ethiopia (Draft Final) documents objective is to establish a national framework and action plan by which responsible federal and regional institutions, stakeholders, and partners will be guided for their efforts in planning, implementing and evaluating the prevention, control and management of invasive alien species (IAS). It assisted to reduce adverse impacts of the IAS and achieve sustainable economic development by putting in place an effective national framework and action plan. Preliminary finding of study made by research team as input for the preparation of this strategy and action plan indicates 1,751,230ha, 19,046ha, 320,494.5ha, 95769.5ha and 31,184ha of land correspondingly covered by *Prosopis Juliflora*, Water Hyacinth, *Parthenium*, *Lanatana Camara* and *Carmine Cochineal* respectively. This document has been reviewed nationally by stakeholders and the final document is expected to be released soon. In certain cases, there has been specific strategies developed for the purpose of controlling or managing the IAS as is the case of, the Ethiopian *Prosopis* Strategy (MoLF, 2017) and the National Water Hyacinth Strategy (MoWIE, 2019).

Business law: The licensing and operation of business activities in the country at present are regulated by the Trade Registration and Business Licensing Proclamation (Proclamation № 67/1997). Article 22(2) of the proclamation requires presentation of a certificate from environmental agencies to the effect that the intended business activity does not violate environmental protection laws as precondition for the granting of business license. The proclamation also states that, if a licensed business is ascertained to have violated environmental protection laws, its license may be suspended until the violation is rectified. Given that environmental impact assessment is one component of environmental laws, it can be inferred that the Trade Registration and Business Licensing Proclamation (Proclamation № 67/1997) has integrated EIA into the framework regulating the licensing and the operation of businesses.

Investment law: Legislation often seeks to provide incentives to promote private and foreigner's capital investment in Ethiopia. Since investment has boomed in recent years, causing deleterious effects on the environment and natural resource base of the country. The Investment Proclamation № 280 of 2002 (as amended by Proclamation № 375/2003) and Investment Regulation № 84 of 2003 are the laws that regulate investment activities in the country at present.

Fishery law: The government has ratified fishery legislation with a view to ensure the conservation, development and utilization of fishery resources in the country (Proclamation № 315 of 2003). Fishery laws seek to ensure the sustainable use of fishery resources in the country. To this end, the proclamation stipulates that federal or regional organs should ensure that development programs and projects will not have a negative impact on the fishery resources of a basin (Art. 8). It states that any subsidiary fishery laws and regulations to be developed under the proclamation should incorporate EIA and permits for the establishment and operation of an aquaculture for commercial purposes shall not be issued unless there is sufficient land and water resources and unless it has been ascertained by the competent authorities that the intended aquaculture will not cause negative impact on the surrounding environment and

natural resources (Art. 6). The proclamation contains important provisions that support EIA relevant to the sustainable utilization of fishery resources.

Wildlife law: The management and utilization of wildlife resources in the country (Proclamation № 541/2007) seeks to enable the active participation of local communities living around wildlife conservation areas and private investors in the conservation, development and utilization of wildlife resources; and to enhance the contribution of wildlife resources to poverty reduction by maximizing their economic benefit. It encourages investment in wildlife-based tourism while given due emphasis the investment to be conducted in such a way that it shall not endanger the ecological integrity of protected areas (Art. 11). It requires that any economic activity to be undertaken in wildlife conservation areas shall be carried out in accordance with the proclamation, and its corresponding regulations and directives (Art. 10).

Water law: - The conservation, utilization and development of water resources is regulated by Water Resources Proclamation (Proclamation № 197/2000) and water resources regulation (Regulations № 115 of 2005). The Water Resources Proclamation aims to ensure that the water resources of the country are duly conserved and protected from harmful effects and utilized for the highest social and economic benefits of the country. Accordingly, the proclamation describes the measures that must be taken for the conservation and protection of waterways and the conditions under which water resources may be exploited. The proclamation prohibits the release of any waste that endangers the lives of humans, animals or plants into water bodies. In addition, it prohibits the clearing of trees or vegetation and the construction of residential houses along the banks of water bodies so as to ensure their protection. Related to the utilization of water resources, the proclamation establishes a system of water resource utilization based on permits. For example, permits are required for the construction of waterworks and for the supply or transfer of water, even if the water is received from another supplier. The water resources regulation lays out the conditions for the issuance, suspension or termination of a water use permit. In this regard, it stipulates that a water use permit will not be issued if the plans entail the creation of pollution or harmful effects to the water resources and the environment. In addition, it states that a water use permit may be terminated or suspended if the water resource in use is temporarily or permanently depleted, or if the usage of the water resource has caused negative impact on the environment. While the water law seeks to ensure the sustainable use of water resources, it falls short of making EIA a mandatory requirement for the issuance of water use and development permits.

Mining law: The Mining Proclamation (Proclamation № 52/1993) and the Mining Operations Regulation (regulation № 182/1994) regulate the mining of mineral resources in the country. These mining laws contain provisions aimed at ensuring that mining activities are carried out in a way and manner that shall not cause significant damage to the environment. In this respect, the mining laws determine the rules on the utilization of water and timber resources in a mining area. While the mining law allows a miner to use water and timber found in the leased area for the mining operation, it requires at the same time that the use of water should not result in substantial reduction of the quantity of quality of the water needed by other users. It also stipulates that one cannot construct dam or divert watercourses without the prior approval of the appropriate government body. With the exception of the clause on pollution, the mining law does not strictly prohibit uses of water by miners that may cause other environmental problems, such

as damage the ecosystem, reduce biodiversity or degrade water resources. Holders of a mining license may log and use timber as dictated by other applicable laws and must submit a restoration plan. Moreover, the mining law obliges a licensee to conduct the operation in a manner that minimizes damage or pollution to the environment. It also requires a licensee to immediately notify the licensing authority of anything likely to jeopardize the property or the environment and to immediately take the necessary steps to mitigate the impacts.

Genetic resource law: As preceded by Convention on Biological Diversity, GoE enacted legislation which provides for community rights and access to genetic resources and traditional knowledge (Proclamation № 482/2006). The proclamation subjects access to genetic resources and community knowledge in the country to the requirement of permit from the Institute of Biodiversity Conservation, and stipulates the conditions under which access to genetic resources may be denied. The proclamation contains provisions meant to ensure that access to genetic resources is carried out without causing harm to the environment. In this regard, it states that access may be denied if the planned use may cause undesirable impact on the environment, an ecosystem, human health or the cultural values of local communities (Art. 13). It also obliges an access permit grantee to respect the laws of the country, particularly those relating to sanitary control, biosafety and environmental protection (Art. 17).

4.2.11. The Institutional Framework of EIA

The current system of government in Ethiopia is organized into a federal structure, comprised of a federal government and 10 regional states. Government administration of EIA in Ethiopia is thus shared between the federal government and regional states. This section provides an overview of the institutions responsible for, and relevant to, the administration of EIA in the country.

The former Environmental Protection Agency and the current Environment, Forest and Climate Change Commission is the lead federal environmental organ with the objective of formulating policies, strategies, laws and standards to ensure social and economic development activities in the country sustainably enhance human welfare and the safety of the environment (Art. 6). Specifically, it is responsible for developing a directive that identifies categories of projects likely to have negative impact and thus require EIA, and for issuing guidelines that direct the preparation and evaluation of EIA study reports (Proclamation № 299/2002, Art. 5 & 8). In addition, EPA is responsible for evaluating the EIA study reports on projects subject to federal licensing, execution or suspension and on projects likely to create inter-regional impacts. The EPA is also responsible for auditing and regulating the implementation of such projects.

Regional Environmental Agencies: The Environmental Protection Organs Establishment Proclamation (Proclamation № 295/2002) requires regional states to establish or designate their own regional environmental agencies. The regional environmental agencies are responsible for coordinating the formulation, implementation, review and revision of regional conservation strategies; and for environmental monitoring, protection and regulation (Art. 15). Relating to EIA specifically, the Environmental Impact Assessment Proclamation (Proclamation № 299 of 2002) gives regional environmental agencies the responsibility to evaluate the EIA study reports on projects that are licensed,

executed or supervised by regional states and that are not likely to entail inter-regional impacts. Regional environmental agencies are also responsible for auditing and regulating the implementation of such projects.

Sectoral Environmental Units: The other environmental organs created by the Environmental Protection Organs Establishment Proclamation (Proclamation No 295/2002) are the “Sectoral Environmental Units,” which are mandated to be established at every competent agency with the responsibility of coordinating and following up activities in harmony with environmental protection laws and requirements (art. 14). Such sectoral environmental units can play important role in ensuring that EIA is carried on development projects and public instruments initiated by government institutions.

5. Sub projects Environmental and Social Impact Assessment procedure

This section describes the process that will guide the development and approval of sub-project environmental and social impact assessments. The procedure adopted from the bank and Ethiopia project environmental impact assessment procedure guideline.

5.1. Sub-project selection, screening and approval procedure

The ESMF sets out the principles, rules, guidelines and procedures to assess the environmental and social risks and impacts of HoA subprojects. The ESMF requires that all relevant subprojects to be screened for social and environmental impacts. Screening will help to determine if a sub-project belongs to high, substantial, moderate or low risk classification and thence to determine the type of environmental assessment that needs to be carried in a level proportional to the nature and scale of the associated impacts and risks. The ESMF also outlines the next steps to be taken to realize the outcomes of the screening and categorization and describes the various elements of the process.

These screening and approval procedure helps the determination of the environmental categories of sub-projects aims to: (i) determine the activities that are likely to have negative environmental and social impacts; (ii) determine the appropriate mitigation measures for activities with adverse impacts; (iii) identify activities requiring separate environmental impact studies (EIA); (iv) describe the institutional responsibilities for the analysis and approval of the selection results, the implementation arrangements of the proposed mitigation measures, and the preparation of separate EIA reports;

Sub-project Screening and Approval Process

The main objective for this is to assess the site specific proposed sub-projects for any potential safeguard issues in the early stage of project design and preparation process. This activity will assist to rate the environmental and social risk depending on the level, and scope of potential environmental and social impacts. The screening of subprojects will be done by completing screening checklist tables indicated in Annex.

Step 1: Sub-project Identification

The initial step will be sub-project or business plan identification. Sub-projects and business plans will be identified by the client.

Step 2: Screening and Checking Eligibility of subprojects

Sub-projects will be subjected to screening process by safeguard focal persons at woreda level using environmental and social screening format to check sub-project eligibility for the HoA program financing. The checklists will be filling out by an Environmental and Social Safeguards experts from woreda environmental office. For sub-projects that have adverse environmental and social concerns, the need to conduct separate ESIA would be decided through the Bank and Ethiopia EIA guideline and discussion among HoA program safeguard experts.

Step 3: Approval of the screening reports

The sub-project environmental and social screening reports will be reviewed and approved by the respective regional environmental protection authority (EPA) of the four regions or by the federal Environment, Forest and Climate Change Commission. If the sub-project has high or medium environmental and social concerns, Ministry of Agriculture would ensure that all the necessary mitigation measures are incorporated in the ESMP tool before approval.

Step 4: ESIA/ESMP preparation and approval

subprojects do not require full ESIA but an environmental and social management plan will be prepared by Woreda HoA focal person in collaboration with the regional program safeguard experts will prepare appropriate sub-project site specific environmental and social management plan tools. The ESMP will be based on generic E&S management and monitoring plan included in this ESMF and send to woreda Environmental Protection Authority for review and clearance.

For sub-projects that need separate ESIA accordingly based on environmental and social screening it will be carried out by Consultants. The ESIA will identify and assess the possible environmental impacts for the proposed activities, assess the alternatives, and design the mitigation, management and monitoring measures to be proposed. These measures will be included in the Environmental and Social Management Plan (ESMP) which will be prepared as part of the EIA for each activity.

The preparation of the ESIA / ESMP will be done in consultation with the stakeholders concerned, including those local community anticipated to be affected. The HoA program environmental and social safeguards experts, with the support of relevant program PIU offices has to prepare the terms of reference for the ESIA and recruit consultancies to carry out the ESIA. The EIA will follow established national procedures, supplemented by those of the AfDB.

Step 5 Consultation and Disclosure of Subprojects Information

Before the approval of the subprojects, the project implementing unit should properly consult the stakeholders and make ESMP available for public review at a place accessible to local people and in a form, manner and language they can understand. The public should also participate and be consulted at all levels of environmental and social assessments including eligibility checks, screening, scoping, impact identification and rating.

5.2. Anticipated Environmental and Social Impacts of Sub-projects

5.2.1 Environmental and Social Benefit of Sub-project

It is expected that HoA beneficial to communities and the environment since (a) it strengthens the resilience of drought prone areas and Pastoral and Agro-Sylvo-Pastoral Production systems to Climate Change through Support for Sustainable Management of Agro-pastoral land, Development of Climate Resilient Infrastructure and Promotion of Climate-smart innovations and technologies. (b) Supporting Agribusiness Development through creating access to advisory services, financing and markets; Supporting Development of Entrepreneurship; and Promoting Domestic Bio-digesters and Solar Energy and (c) Strengthening Adaptive capacity to Climate Change through Development of Climate Services, Building capacity of main stakeholders in the Agro-pastoral sectors in the drought prone areas for mainstreaming and monitoring Climate Change and Strengthening the Operational Capacity for resilience.

HoA program will improve the PAP production system; generate income through tourism, non-wood and fishery activities, creation of jobs. Specific activities including the construction of medium-sized hydraulic structures (small dams, canalization for irrigation, drainage networks, canalization and piping of water for sanitation and health) and drilling for community water supply, including energy generation and supply systems projects, integrated rangeland management, new business that address women and youth, nutritional security based activities, availability and adoption of CSA, Climate services , and early warning systems have the following positive impacts:

- Development and introduction of stress tolerant and improved seeds for crops and livestock feed will help overcome recurrent drought and creates sustainable production; PAP will improve capacity to minimize climate related risk by accessing the availability of climate related information in a form pastoralist community easily understand, Livestock feeds and food production yield increased by adopting droughts tolerant varieties and water harvesting technologies enhanced food and livelihood security of the pastoralist. The increased livestock and crop production encourage Agro-industry sectoral development.
- Creation of a market for construction materials, employment opportunity both during construction and operation phases, capacity building and training in the town, and resulting enhancement of organizational, financial and technical capacities of town, the project will create temporary job opportunities for both skilled and unskilled workers of the local community.
- Hydraulic structures for human and livestock purpose will avoid long distance travel to fetch water (a job usually done by women women's work burden will be reduced as water will be provided to the local people and long distance travel for water collection will be avoided.) so that the time can be used for other economic activities, water supply stimulates the development of other infrastructures/it has multiplier effect/. Ground water recharge and access to water; better comfort, better lifestyle and domestic hygiene, reduction in water-borne diseases such as dysentery, cholera and others, coverage of pure quality water increases in the project area. Moreover infrastructure facilities are to be shared by different ethnic groups and this can help achieve peace among the ethnic groups in the pastoral and Agro-pastoral communities by increasing interaction and fostering cooperation; the Rehabilitation /construction of hydraulic infrastructure, small holder irrigation schemes sub projects will provide stable water point will enable pastoralist livelihood to transform to a sedentary Agro pastoral livelihood.
- New farm and non-farm Business created by subprojects will bring employment opportunities for people in the community and enhance the income of participants across the value chain,

Rehabilitation /Construction of rural feeder roads sub projects will enhance market and information access for the pastoralist and Agro pastoralist communities. Construction and equipping of small processing and marketing units for agricultural products sub project create better and hygienic environment in trading crop, livestock and livestock products for pastoralist and Agro pastoralist. The sub projects to create alternative income generating enterprises from invasive alliance species eradication by utilization, products, fishing and related businesses will bring positive impact in terms of socio- economic empowerment of the households, in creating food security at household level and building resilience of the household and community for climate related shocks.

- Projects and sub-projects on studying the carrying capacity of the environment under different human and livestock populations (stresses), Development of a multi hazard early warning platform, Promote setting-up and support for the operation of a regional observatory on climate, transhumance and mobility commutatively contribute in an effort to minimize conflict incidence among pastoralist usually created by resource competition and climate induced resource depletion.
- An effort to participate and mainstreaming different groups (women, boys, girls and men's) will have impact in minimizing disparity among vulnerable parts of the pastoralist community (elders, women, children and youth). Livelihood will be more diversified by participating on improved fishing, honey, crude salt production, Gum and incense production and ecotourism as well as from improving the livestock markets will improve income of households, diversified livelihood and income cumulatively builds the capacity of pastoralist households for resilience to climate related risk.
- Livestock Based Business development and improvement of the value chain along the market flourished the Pastoralist economy and livelihood by improved advisory systems, financial accessibility and cross border Livestock markets. Value Addition of Livestock Products increased both in diversity and quality that helps to attract more youth employment and income generation. The cattle markets once constructed will be sources of income for the local governments through collection of fees; create opportunity to flourish small retail business in and around the cattle market.
- Pastoralist Community access to information and services including improved nutritional rich food preparation (nutritional sensitive food preparation) and consumption methods, increasing the accessibility of nutritionally dense food items by livelihood diversification activities including promotion of backyard perimeter green leafy vegetable gardening, proper use of health centers and advisory service and overall improvement of households' incomes.
- Applications of bio-digester and solar energy at household level would improve living condition of Pastoralist, soil fertility of backyard farms increased from application of composts. Solar energy improves the livelihood condition and quality of life among the community and plays a part in transforming the use of more energy efficient and renewable energy sources which has minimum risks to the environment and natural resources.
- Regional Collaboration among national institutions for development and dissemination of climate information and climate Resilience practice created synergy to avail more knowledge and information to pastoralist community that will help to create resilience and adaptive capacity to climate related risks.

5.2.2. Environmental and Social Negative Impacts of Sub-project

Though the anticipated community based small scale sub-projects to be financed by HoA program including hydraulic structures (small dams, canalization for irrigation, drainage networks, canalization and

pipings of water for sanitation and health) and drilling for community water supply have various benefits and very crucial for the transformation of socioeconomic, it will have potentially some adverse effects on biophysical and socio economic environment if not properly managed. Different impacts are likely to arise at different times during the project's activity phases particularly during construction and operation phases. The overall potential negative impacts are remained as Category II and expected to be site-specific and mostly reversible. These impacts will be minimized by incorporating the required mitigation measures. The potential negative impacts of the project are highlighted from construction to operation phases as follows:

At construction phase the following potential adverse impacts generally could happen: removal of top soil and landscape alteration, land requirement for construction purpose, loss of commercial/perennial trees, impact on air quality due to dust emission, impact on flora environment, nuisance noise, compaction of soil and work place accidents. Moreover temporal camp construction in the project areas in order to undertake construction activities of the medium scale irrigation, drilling for community water supply, including energy generation and supply systems, construction of embankments for the protection of head-waters and water catchments, construction of feeder roads, the contractor will need to set up site facilities or camps for workers accommodation, offices, stores and parking in the project area. It is estimated that some amount of area of land will be needed temporarily for such purposes. This will create land resource use competition or conflict among inhabitants. On the other hand, if proper waste management facilities lack in the camping site, the waste generated from employed construction staff members and from machineries /temporal garage for machine maintenance, accidental spillage of fuel, lubricants and other chemicals used in the construction process would likely be a source of water contamination, / will pollute the surrounding environment.

Impacts on Archaeological, Cultural, Religious and Historical Sites: review of previous surveys in the region, there are no any known or documented sites of archaeological, cultural, religious or historical value along the proposed project areas. But a due emphasis should be given at specific construction sites, for each subproject that involve construction of structures and demands land acquisition, to clear that the area has no any conflict of interests with any cultural, archaeological, historical or religious purposes and this should be cleared prior to the start of any activities.

Air pollution: during construction phases air pollution will be occurred as the level of dust particles emissions /from vehicles movement, during loading and quarrying could be substantial. Due to existence of settlements around the area where construction works are carried out there could be air pollution through dust emission from excavation works more likely/will be carried out in the dry season, and it can be expected that these will lead for dust emission to the local surrounding environment.

Impact on water quantity and quality: Water pollution can be caused by the use of agricultural inputs (fertilizers, herbicides and pesticides) usually expected to be increased with the promotion of improved pastoral and agricultural production in sub projects. Impact on water quality could result from human and animal wastes, solid wastes, high way runoff, river water intrusion. Open defecation and livestock free grazing are common in the project area. Open disposal of solid wastes and discharge of liquid wastes is also common within the town, because of erosion high sediment load accumulated to water bodies and decreases lifespan of dams, boost algal blooming.

Conflicts: social conflicts between the source (at the borehole site) have potential impact on physical cultural resources and conflict between the upper and lower communities living in the watershed due to the use of water and pasture.

Health impacts and accidents: malaria infestation in the local area if there is formation of pond around the bore holes, ponds and small reservoir, solid wastes generation, occupational health and safety for

workers and communities, local air pollution due to emission of exhausts from machinery and vehicles and drowning of children and/or animals if trenches are excavated in the rainy season. Noise pollution will arise from heavy duty construction equipment used for hydraulic structures and feeder road construction and other facilities. These localized noise levels and vibration depend on the intensity and scale of earthmoving equipment and machinery, construction plants and construction activities such as piling, excavation or installation of equipment, loading of construction materials, concrete pouring, drilling. Increased localized noise levels usually occur in short term.

Impact on crops: excavation of trenches may interfere with cropping practices if carried out before crop harvesting.

Impact on soil: increase in soil erosion related to construction and rehabilitation activities particularly in degraded lands with loose soils, soil erosion level would be exuberated if trenches are excavated in the rainy season, soil contamination from fuel, lubricants and oil spills, soil layer disturbance and compaction due to the entrance of heavy machinery and trucks, disturbance to topsoil created by earthmoving works and heavy vehicle traffic at construction phase, limited loss of flora and fauna;

Marginal and Vulnerable Group: If the sub projects properly participate the marginalized and vulnerable groups of the society, the project outcomes could play to further widening the gap in livelihood and social status created among marginal groups in the Pastoralist and Agro Pastoralist Communities (Poor, Landless, Minority Groups, Women, Old and Youths).

Change in behaviour , life style and livelihood: influx of people in the project area in search of employment may leads to conflicts with locals communities, increased yields of pastoral and Agro pastoral lands may lead to increase in the value of the lands which leads for motive of resettlement may induce conflicts, Increased income may directly encourage risky social behaviour and disruption of traditional lifestyles; transmission of disease including HIV and COVID-19 may increase due to frequent visit of project based temporary employees and job seekers (outsiders) from urban centres. Moreover, continuous interaction with outsiders throughout the project may create negative impact on morals, and local culture and traditions of the local communities, increased opportunities for tourism may further lead to mixing of people with different cultural backgrounds which may lead to interference in traditional lifestyles.

Chemical and related environmental Pollution: Yield improvement may result more demand for use of fertilizers and Agro chemicals increased health risk to communities and livestock from poor water quality from the chemical inputs. Construction of fish ponds and small hydraulic structures may increase mosquito and related disease. Health issues due to increased use of livestock pesticides, drugs, vaccines & other chemicals, ex. disposal of animal drugs, pesticides, fertilizers and their packing materials

Conflict in benefit sharing: Promotion and development of communal resources including hydraulic structures, non-wood products and fishing creates a ground for potential conflict in relation to benefits sharing.

Resource Depletion: water source development in areas where it is usually needed dearly may results in unmanaged in-flux of livestock that can cause overgrazing with irreversible ecological consequences. While if the water resources are mismanaged and over discharged it creates depletion of the ground water resources in the area. Potential impact on biodiversity, mainly as a result of expansion of pasture and farm lands at the expense of forests,

5.3. Sub-Project Mitigation Measures

The role of safeguards has evolved beyond the “do no harm” approach to proactively identify opportunities to improve the lives of the population in the area of influence of a project. Safeguard measures include the existence of a grievance redress mechanisms; consideration and usage of local knowledge; participation in all stages of the project cycle; application of free, prior and informed consent; inclusion of marginalized stakeholders, such as indigenous peoples, women and youth; equitable sharing of project benefits; and the use of traditional methods of decision-making. Community participation, customary tenure, development benefits, and compliance mechanisms have also been highlighted as key safeguard issues. The most vulnerable populations should not be the ones who bear the negative effects of development projects without appropriate measures to mitigate them. When properly implemented, safeguards can not only reduce adverse impacts but also enhance the development potential of projects, contributing to sustainability and overall viability of investment projects.

The HoA DRSLP II Project is Pre classified as Environment Category 2 at regional level. Final Project categorization for Ethiopia Component will be determined when feasibility studies are concluded, site-specific projects are designed, and project component activities that will lead to outcomes properly and adequately presented.

When identifying the main risks, appropriate mitigation measures should be applied depending on the specific situation of each project site. The list of generic environmental and social (E&S) impact mitigation measures includes:

- No construction should be undertaken until the Project Affected Persons (PAP) are compensated for their losses and have received their resettlement rights,
- Exploitation of land and related assets can only take place after compensation has been paid and, where appropriate, resettlement sites and relocation allowances have been granted to the displaced persons. For project activities requiring resettlement or loss of housing, the policy further requires that measures to assist IDPs be implemented,
- The landfill site will be chosen near the works, to receive the residues from the excavation and site work and its development will be carried out in an approved and controlled manner. A waste storage and management system must be put in place in accordance with the regulations in force.
- Classification of waste to make it possible to reuse it.
- Ensure that any disturbance of flora is limited to the sub-project area and avoid spillover effects on neighboring areas. Along with that, there will be strict monitoring of construction vehicles to ensure they only work in the area to be disturbed. The contractor should set up a tree planting program to replace the vegetation or cleared trees in the area,
- Drivers of construction vehicles should be educated so that they do not let vehicles idle and exhaust emissions are reduced and maintain all machinery and equipment in good working order to ensure minimum emissions of carbon monoxide, NOX, SOX and suspended particles,
- To mitigate dust emissions the construction area should be fenced to reduce the effect of dust on surrounding populations, scarves should be folded correctly to minimize dust emissions to the public; sprinkle soil surfaces with water to reduce dust levels; Construction trucks transporting materials to the site, delivering sand and cement to the site must be covered to prevent dust emissions into surrounding areas; masks should be provided to all personnel in areas prone to dust emissions during construction; piles of excavated soil should be closed / covered / watered in dry or windy weather to reduce dust emissions and drivers of construction vehicles must be educated in order to limit their speed to reduce dust levels.
- The program should ensure that private companies / operators and their sub-contractors have Occupational Safety and Health (OSH) training which may include hazard awareness, safe work

practices, and emergency preparedness for their employees. / workers to ensure that they are well informed about site work rules, personal protection and prevention of injury to co-workers

- The program will require private companies / operators and their sub-contractors to implement an Environmental, Health and Safety (EHS) plan that will outline procedures for avoiding health and safety incidents and for medical treatment emergency. This will be achieved by making this aspect a component of a contractual agreement;
- All chemicals should be stored in budding areas and clearly labelled, specifying the nature and amount of chemicals in individual containers;
- These proposed mitigation measures aim to ensure that noise generated by construction and operation activities is minimized and meets relevant noise standards,
- Implement Soil erosion appropriate mitigation measures during construction and operational phase.
- Social risks linked to the influx of labor and gender-based violence (GBV) /Provision of cultural awareness training for workers regarding engagement with the local community; supply of local labor; Provision of drug prevention and management programs; implementation of the education program on HIV / AIDS, COVID-19 and education on disease transmission; mandatory and regular training for workers on legal behavior required in the host community and the legal consequences for non-compliance with laws and provision of casual employment for both men and women throughout the implementation cycle/.

6. Environmental and Social Management Plan (ESMP) Framework

This Environmental and Social Management Plan (ESMP) framework is an implementation guiding tool for the ESMF environmental and social impacts management plan. It will guide the implementation of the proposed HoA program in Ethiopia to mitigate environmental and social. The plan will support in addressing the environmental and social impacts of the program and to enhance the program over all contribute to economic growth as well as food security in the program intervention area of influence.

The ESMP also fulfils the African Development Bank's environmental and social safeguards policy on borrower requirements to prepare a framework for Environmental and Social Management Plan (ESMP) that is designed in line with Ethiopia's environmental and social safeguards establishes the environmental and social impacts of the project's proposed activities. It sets out, in general, the mitigation and monitoring measures and institutional arrangements to address adverse environmental and social impacts. It provides the project implementers with an environmental and social management plan that enables them to mitigate potential environmental and social impacts, including through the preparation of a site-specific ESIA where applicable.

Conducting field visits to the sub-project site and developing an understanding of the biophysical and socio-economic environments including the rural setting around the project site is essential to appraise how the sub-project activities are environmentally sound and socially acceptable.

Table 8: Table ...summary of project activities, anticipated impact, mitigation managements with cost estimation

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
Sub-component 1 Multipurpose water supply/distribution system from bore holes Ponds (xx m3), Spring development, <i>including distribution network</i> , Birkas (underground tanks/subsurface dams), Hand-dug wells, Rehabilitation of existing water infrastructure and Small scale irrigation for crops and fodder production (<i>bulk irrigation water & distribution network</i>).						
Pre-Construction (Planning/Design) Phase	<ul style="list-style-type: none"> Un proper site selection for camp site and west disposal /Site installation/ Lack of awareness lead to social conflict, Employment may leads to conflicts with locals communities, Storage of materials, circulation of construction machinery; Risk of non-respect for the integrity of cultural sites (risk of borrowing materials or depositing materials in these sites) Traditional lifestyles; transmission of disease including HIV and COVID-19, Movement of plant and workforce into areas could introduce /disseminate invasive species (Prosopis), 	<ul style="list-style-type: none"> Approval of relevant authorities at all locations, Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists and other, Good construction site “housekeeping” and management procedures (including site access), Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, Staff training and awareness raising in communities, Development of an Employment Plan, with clear employment requirements and procedures for the construction and operational/maintenance workforce, 	<ul style="list-style-type: none"> Compliance with laws and regulations, Environmental and social awareness, 	<p>Project implementation units from federal to operational level and contractor</p> <p>>> >></p> <p>>> >></p>	<p>Part of the construction cost</p> <p>>> >></p> <p>8240.00</p> <p>Part of the construction cost</p>	AfDB
Construction Phase	<ul style="list-style-type: none"> Generation of wastes/emissions, pollution of soils and water. Loss, degradation or fragmentation of protected or ecologically sensitive areas (e.g. wetlands, migration routes), and other areas of conservation interest, and degradation following poorly managed rehabilitation. Impacts on habitats and species from habitat alteration and degradation (e.g. from reduction in water supply, changes in water flow and drainage, soil erosion, pollution of water, soils or air, introduction of invasive species). Earthworks and clearance may lead to loss of plant species and habitats Potential for adverse effects if 	<ul style="list-style-type: none"> Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimization of activity within these zones. Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input so as to maintain the integrity of the habitat, backed up by a long-term monitoring program and corrective actions as necessary. Restrictions on access to all temporary access roads, and their removal after construction, Staff training and awareness raising in communities, Development of transparent and culturally appropriate 	<ul style="list-style-type: none"> Loss of vegetation, Land degradation Compliance with laws and regulations, Water quality in communities meets international standards, Proper waste management practices related to construction works, Land restoration revegetation after construction and or rehabilitation works, Solid waste separation 	<p>Project implementation units from federal to operational level, contractor, and federal to community level stakeholders</p>	<p>Part of the construction cost</p> <p>22,000.00</p> <p>Part of the construction cost</p> <p>16250.00</p>	AfDB

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	<p>expectations not met and community relations</p> <ul style="list-style-type: none"> • Affects to cultural heritage sites by construction activities well managed, • Poor construction management practices may lead to adverse effects on safety, human health and wellbeing. • Occurrence of communicable diseases, including HIV/AIDS, COVID-19 and sexually transmitted diseases (STDs). • Real or perceived disruption to normal community life, through the physical presence of a workforce; in particular, potential for conflicts to occur over water use, • Differences in nationality, ethnicity, religion, etc. may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentment, 	<p>communication with communities an Employment Plan, with clear employment requirements, and procedures for the construction and operational /maintenance workforce,</p> <ul style="list-style-type: none"> • Fair and transparent hiring and staff management procedures, • Training and awareness raising and Implementation of a health management for workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases; health awareness raising campaigns for communities on similar topics, • Facilitate programs/measures to ensure appropriate sanitary and medical facilities are available, • Implement environmental management measures for vector control, • Implementation of a Grievance Procedure, • Establishing communal bylaw and users committee for major resources built or enhanced through the project for proper management and preventions of conflicts and resource degradation, • Fencing or physical barriers of the water sources and the reservoir to avoid entrance of children, livestock and wild life, • Ensure the participation and benefit of marginalized and vulnerable part of the communities (poor, landless, minority groups, women, old and youth) throughout and after the project. 	<p>and recycling/disposal measures adopted in camp settlements</p> <ul style="list-style-type: none"> • Compliance with the Environmental Guidelines for Contractor, • Number of people resettled • Environmental and social awareness, • Effect of program implementation on local household economies. 		<p>Part of the construction cost</p> <p>10500.00</p>	AfDB
Operation and Maintenance Phase	<ul style="list-style-type: none"> • Generation of wastes/emissions, pollution of soils and water. • Potential for adverse effects if expectations not met and community relations are not well managed, • Runoff from grazing areas and land used for growing feed (containing fertilizers, pesticides and herbicides 	<ul style="list-style-type: none"> • Regular preventative maintenance of all system components to ensure minimal wastage of water, • Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimization of activity within these zone, 	<ul style="list-style-type: none"> • Loss of vegetation, • Land degradation • Water quality in communities meets international standards, • Proper waste management, 	<p>Project implementation units from federal to operational level, contractor, and federal to community level stakeholders</p>	<p>Part of the construction cost</p> <p>>> >></p> <p>250,000.00</p>	AfDB

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	<ul style="list-style-type: none"> etc.). Impacts on habitats and species from habitat alteration and degradation (e.g. from reduction in water supply, changes in water flow and drainage, soil erosion, pollution of water, soils introduction of invasive species). Earthworks and clearance may lead to loss of plant species and habitats, Water borne and water related diseases, especially those associated with water dwelling disease vectors (new areas of standing water created) or poor sanitary conditions. 	<ul style="list-style-type: none"> Invasive Species Management Plan, which should be developed and implemented in consultation with authorities, and align with national strategic plan, Staff training and awareness raising in communities, Clearance of invasive species during routine maintenance of water storage and distribution systems (eradication by utilization) Implementation of a Grievance Procedure 	<ul style="list-style-type: none"> Land restoration Revegetation after construction and or rehabilitation works, Pest management practices by communities, Best practices in the implementation of program activities, Environmental and social awareness, Effect of program implementation on local household economies 		<p>25,360.00</p> <p>Part of the construction cost</p>	AfDB
Sub-comp 2 Livestock Health Infrastructures: fodder storage/fodder bank, Animal Health Posts, pastoralist training center PTC/advisory service provider center , vet clinic or storage facility, Construction of livestock Market Center, Forage Market Centers, Construction of community-level processing unit (demand-driven - Milk Collection Centers etc.) for Youth and Women's.						
Pre-Construction (Planning/ Design) Phase	<ul style="list-style-type: none"> Un proper site selection for camp site and west disposal /Site installation/, Lack of awareness lead to social conflict, Employment may leads to conflicts with locals communities, Storage of materials, circulation of construction machinery; Risk of non-respect for the integrity of cultural sites (risk of borrowing materials or depositing materials in these sites), Traditional lifestyles; transmission of disease including HIV and COVID-19, Movement of plant and workforce into areas could introduce /disseminate invasive species (Prosopis), 	<ul style="list-style-type: none"> Approval of relevant authorities at all locations, Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists and other, Good construction site "housekeeping" and management procedures (including site access), Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, Staff training and awareness raising in communities, Development of an Employment Plan, with clear employment requirements and procedures for the construction and operational/maintenance workforce, 	<ul style="list-style-type: none"> Compliance with laws and regulations, Environmental and social awareness 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	<p>5000.00</p> <p>Part of the construction cost</p>	AfDB

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
Construction Phase	<ul style="list-style-type: none"> Noise and vibration, livestock itself, may disturb sensitive noise receptors (human and fauna), Release of hazardous substance vehicle spills leading to soil, surface or groundwater contamination, Pollution of watercourses caused by wastes from livestock Dust from could affect human health, vegetation (including crops), Land take for development of livestock projects may physically displace people, or lead to loss of assets, Waste disposal from health posts, milk collection unites, Surface and ground water contamination. Animal Diseases Transmit ion Conflict between consumers 	<ul style="list-style-type: none"> Good construction site “housekeeping” and management procedures (including site access), Implementation of standard good wastewater management and disposal procedures; wastewater drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible, Dust and odor control and suppression measures, such as dampening and use of vegetation hedges. Sensitive route selection for access roads, and siting of construction works and facilities, Careful siting of all project components, with advice from biodiversity, authorities/wildlife specialists, Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive, and avoidance or minimization of activity within these zones. Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, Careful consideration and selection of areas proposed for livestock projects, and siting of project facilities, to avoid occupation of areas which are inhabited or regarded as having high value by communities where possible. Development of an Employment Plan, with clear employment requirements and procedures for the construction (and if appropriate, operational) workforce, Staff training and awareness raising in communities, Transparent and culturally appropriate communication with communities regarding opportunities for involvement in the project, Fair and transparent hiring and staff management procedures, 	<ul style="list-style-type: none"> Loss of vegetation, Land degradation Compliance with laws and regulations, Water quality in communities meets international standards, Proper waste management practices related to construction works, Land restoration revegetation after construction and or rehabilitation works, 	<p>Project implementation units from federal to operational level, contractor, and federal to community level stakeholders</p>	<p>Part of the construction cost</p> <p>>> >></p> <p>Part of the construction cost</p> <p>8600.00 Part of the construction cos</p>	<p></p> <p>AfDB</p>

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
		<ul style="list-style-type: none"> • Employment practices, working conditions and workforce living conditions should conform to International Labor Organization (ILO) Standards and national regulations, • Awareness creation , changing to value chain /charcoal radiation by utilization/, Clearing and experience sharing, 			15500.00	AfDB
Operation and Maintenance Phase	<ul style="list-style-type: none"> • Pollution of watercourses caused by wastes from livestock, • Odors associated with livestock and waste may have nuisance value for nearby receptors, • Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways, • Earthworks and clearance may lead to loss of plant species and habitats of conservation interest. • Invasive Species /prosopis/Allelopathic chemicals Injuring livestock with its poisonous thorns and causing goat teeth to rot and fall out because the small seeds get stuck between the teeth, Impacts to recreational opportunities and other human values, • Pollution of ground and surface water, soil from discharges and accidental releases, from processing units, • Chemical management in animal laboratories, veterinary and health posts. • Discharge of construction site sewage effluent polluting watercourses, • Potential for economic displacement of specific individuals or groups with existing income b <p>Headed from traditional milk marketing if they are excluded from projects.</p> <ul style="list-style-type: none"> • potential for adverse effects if expectations not met and community relations are not well managed, 	<ul style="list-style-type: none"> • Implementation of standard good wastewater management and disposal procedures; wastewater drainage outlets to discharge into vegetated areas if possible; vegetation along watercourses and drainage lines to be retained if possible, • Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive, and avoidance or minimization of activity within these zones. • Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value • Implementation of a Grievance Procedure, • Implement appropriate waste disposal measures and using bio-remediation measures, 	<ul style="list-style-type: none"> • Land degradation • Water quality in communities meets international standards, • Land restoration • Revegetation after construction and or rehabilitation works, • Waste management, separation and recycling/disposal measures • Best practices in the implementation of program activities, • Population incomes, • Environmental and social awareness, 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost	

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	<ul style="list-style-type: none"> Odors associated with dairy processing and animal health clinics, market centers infrastructure /waste may have nuisance value for nearby receptors, 					
Sub-Comp 3 Sustainable Land Management: Bush clearing (including invasive species), Area closure, Soil and water conservation activities (Land restoration)/mech. & biological, Re-seeding/rangeland management (community contribution)						
Pre-Construction (Planning/Design) Phase	<ul style="list-style-type: none"> Un proper site selection for camp site and west disposal /Site installation/ Lack of awareness lead to social conflict, Employment may leads to conflicts with locals communities, Storage of materials, circulation of construction machinery; Risk of non-respect for the integrity of cultural sites (risk of borrowing materials or depositing materials in these sites) Traditional lifestyles; transmission of disease including HIV and COVID-19, Movement of plant and workforce into areas could introduce /disseminate invasive species (Prosopis), 	<ul style="list-style-type: none"> Approval of relevant authorities at all locations, Careful site selection and siting of all project components, with advice from biodiversity authorities/wildlife specialists and other, Good construction site "housekeeping" and management procedures (including site access), Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, Staff training and awareness raising in communities, Development of an Employment Plan, with clear employment requirements and procedures for the construction and operational/maintenance workforce. 	<ul style="list-style-type: none"> Compliance with laws and regulations, Environmental and social awareness 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost	AfDB
Construction Phase	<ul style="list-style-type: none"> Noise and Vibration Noise and vibration from equipment, traffic and activities during Bush clearing and rehabilitation at worksites and associated facilities, may disturb sensitive noise receptors (human, Wildlife and fauna). Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways, Soils erosion from loose soils; Loss of vegetation from site clearance; Potential spread of disease in livestock and humans; Creation of borrow pits; May trigger some impacts on physical cultural resources such as 	<ul style="list-style-type: none"> Minimization soil disturbance with revegetation as soon as feasible, with native species, Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable, Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring program and corrective actions as necessary, Implementation of a Grievance Procedure, Restoration and enhance ecosystem 	<ul style="list-style-type: none"> Loss of vegetation, Land degradation Compliance with laws and regulations, Proper waste management practices related to construction works, Land restoration revegetation and or rehabilitation works, 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost	

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	graves amongst others;	functions and services, •preparation of fodder sidling's				
Operation and Maintenance Phase	<ul style="list-style-type: none"> • Soils erosion from loose soils; Loss of vegetation from site clearance; • Potential spread of disease in livestock and humans; • Creation of borrow pits; May trigger some impacts on physical cultural resources such as graves amongst others; • Over greasing leads to land degradation, 	<ul style="list-style-type: none"> • Implementation of a Grievance Procedure, • Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring program and corrective actions as necessary. • Restoration and enhance ecosystem functions and services, • preparation of fodder sidling's, • Invasive Species Management align which national plan, should be developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species. • Awareness creation on consequences of forced and child labor, and occupational safety and standards, • Implementation of a Grievance Procedure, 		Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost 250320.00 Part of the construction cost	AfDB
Sub-comp 4. Facilitating access to market and Construction of Access roads						
Pre-Construction (Planning/ Design) Phase	<ul style="list-style-type: none"> • Un proper site selection for camp site and west disposal /Site installation/ • Lack of awareness lead to social conflict, • Employment may leads to conflicts with locals communities, • Storage of materials, circulation of construction machinery; • Risk of non-respect for the integrity of cultural sites (risk of borrowing materials or depositing materials in these sites) • Traditional lifestyles; transmission of disease including HIV and COVID-19, • Movement of plant and workforce into areas could introduce /disseminate invasive 	<ul style="list-style-type: none"> • Good construction site "housekeeping" and management procedures (including site access), • No abstraction without prior approval of relevant authorities at all locations, • Earthworks to be designed to achieve a balance between cut and fill wherever possible, • Demarcation and avoidance of areas of conservation interest (high value species, feeding or breeding sites, migration routes, etc.) where possible, and wildlife rescue and translocation where appropriate, under expert supervision, 	<ul style="list-style-type: none"> • Compliance with laws and regulations, Environmental and social awareness 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost	

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	species (Prosopis),	<ul style="list-style-type: none"> Careful route selection and siting of all project components, taking account of community consultation/specialist surveys, Preparation and implementation of an Influx/In-migration Management Plan, in consultation with local authorities. <p>Staff training and awareness raising in communities,</p>			6500.00	AfDB
Construction Phase	<ul style="list-style-type: none"> Dust from could affect human health, vegetation (including crops) and wildlife Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways, Pollution of Soils and Water, Discharge of construction site/camp sewage effluent polluting watercourses. Interaction between workforce and local communities may increase occurrence of communicable diseases, including HIV/AIDS, COVID-19 and sexually transmitted diseases (STDs) Displacement or damage to cultural heritage sites by construction activities, harm to the setting, amenity value, etc. of the site due to road construction or operation, Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways Labor and Working Conditions Poor management of occupational health and safety could lead to accidents, injuries and illnesses among workers; mental health issues may arise due to remote or enclosed living. Road developments into remote areas will facilitate access, and can lead to land clearance for agriculture, and increased disturbance and pressure on natural resources through bush meat hunting, logging, fire, etc. Direct Impacts on Flora and Fauna Introduce invasive species that adversely 	<ul style="list-style-type: none"> Minimization of cleared areas and soil disturbance, with revegetation as soon as feasible, with native species Detailed alignment to take account of local groundwater conditions, e.g. by avoiding areas with springs or where the water table is shallow, Avoidance of areas liable to flooding, slope instability, and water crossings where possible, Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable. Restrictions on work and other activities around water bodies (e.g. vehicle washing), and minimization measures around water crossings where this not possible. Sensitive local route selection and siting of construction facilities. Basic site facilities including latrines for the workers need to be available for service earlier to avoid open area defecating. Dust control and suppression measures, Implementation of a Grievance Procedure, Wherever feasible, establishment of buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive and avoidance or minimization of activity within these zones Rehabilitation of cleared areas with native species, and ecosystem restoration in 	<ul style="list-style-type: none"> Proper waste management practices, Land restoration and revegetation construction and or rehabilitation works, Best practices in the implementation of program activities, Population incomes, Environmental and social awareness 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	<p>Part of the construction cost</p> <p>Part of the construction cost</p>	

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
	<p>impact fauna, flora, ecosystems, and crops.</p> <ul style="list-style-type: none"> Development or upgrading of roads may physically displace people, or lead to the loss of assets Economic Development and Employment Direct employment of local population in workforce, and stimulation of local economy through demand for goods and services will enhance livelihoods and economic activity in local communities, but potentially adverse effects if community relations are not well managed. Procurement of local goods and services for the road development and workforce could deplete resources available for local communities. Cultural Heritage Displacement or damage to cultural heritage sites by construction activities, harm to the setting, amenity value, etc. of the site due to road construction or operation, Community Health, Safety and Security Interaction between workforce and local communities may increase occurrence of communicable diseases, including HIV/AIDS, COVID-19 and sexually transmitted diseases (STDs), Differences in nationality, ethnicity, religion, etc. may lead to discrimination and harassment, and differences (perceived or real) in working conditions between workers may lead to resentments, Poor management of occupational health and safety could lead to accidents, injuries and illnesses among workers; mental health issues may arise due to remote or enclosed living. 	<p>habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring program and corrective actions as necessary.</p> <ul style="list-style-type: none"> Monitoring, technical support, and supervision of the implementation, Wildlife crossings for terrestrial animals, and design of culverts/crossing structures to avoid impacts on animal movement. No ground clearance upstream of sensitive areas unless appropriately engineered drainage installed, Bush meat Hunting and Wildlife Trade Management Plan agreed with government authorities and implemented jointly, Prohibition on workforce (except security personnel) having guns in work areas or accommodation, Sensitization and public awareness campaigns against hunting and bush meat the trade amongst local communities. Staff training and awareness raising in communities. Transparent and culturally appropriate communication with communities regarding employment opportunities. Fair and transparent hiring and staff management procedures. Employment requirements and vocational training plan to be agreed with local institutions, so that local people can be trained to meet the project's needs in a timely fashion. Good construction site "housekeeping" and management procedures (including site access). control of pollution under Physical Impacts heading Training and awareness training for workforce and their dependents on 			<p>Part of the construction cost</p> <p>Part of the construction cost</p>	

Project Activity	Anticipated Environmental and Social Impacts	Proposed Mitigation/Management Measure(s) and Objective of Mitigation/Management Measure(s)	Monitoring and Reporting (including performance indicators)	Implementation Plan and Institutional Responsibilities	Cost Estimates and Source of Funds USD	Comments
		<p>HIV/AIDS, COVID-19 and other STDs, and communicable diseases including malaria; health awareness raising campaigns for communities on similar topics,</p> <ul style="list-style-type: none"> • Implementation of a Grievance Procedure, • Training for all staff in acceptable behavior with respect to community interactions • Ensure the participation and benefit of marginalized and vulnerable part of the communities (poor, landless, minority groups, women, old and youth) throughout and after the project • Proper compensation should be settled prior to any voluntary settlement for using lands and other resources for subprojects 			12500.00	
Operation and Maintenance Phase	<ul style="list-style-type: none"> • Loss, fragmentation and degradation of habitat, and severance of animal migration routes and pathways, • Severance of terrestrial routes and watercourses used for migration or for access to feeding and breeding areas, • Road developments into remote areas will facilitate access, and can lead to land clearance for agriculture, and increased disturbance and pressure on natural resources through bush meat hunting, logging, fire, etc. • Direct Impacts on Flora and Fauna • Invasive Species Movement of plant a workforce into areas, and of road traffic during operation, could introduce invasive species that adversely impact fauna, flora, ecosystems, and crops. 	<ul style="list-style-type: none"> • Speed controls and other traffic calming measures to reduce excessive acceleration around populated& wildlife sites, • Dust control and suppression measures. • Speed controls and other traffic calming measures to reduce excessive acceleration around populated& wildlife sites. • Rehabilitation of cleared areas with native species, and ecosystem restoration in habitats of conservation value, using specialist advice and input, backed up by a long-term monitoring program and corrective actions as necessary • Observance of seasonal sensitivities (e.g. breeding seasons), and alteration of activity to reduce noise levels at that time, • Sensitization and public awareness campaigns against hunting and bush meat the trade amongst local communities. • Implementation of a Grievance Procedure Invasive Species Management Plan align which national plan, should be developed and implemented in consultation with authorities, including appropriate eradication measures for different species/groups of species. 	<ul style="list-style-type: none"> • Land restoration • revegetation after construction and or rehabilitation works, • Population incomes, • Environmental and social awareness, • Population incomes, 	Project implementation units from federal to operational level, contractor, and federal to community level stakeholders	Part of the construction cost	

7. Monitoring and Subproject Supervision:

The lead implementing agent Environment Forest Climate change commission/EFCC/ ministry of Agriculture with the help of relevant authorities must monitor the environmental and social effects of project implementation and the success of mitigation measures. This should be done by an independent team of experts that include MoA, Environmental Protection Authority, Ministry of Women and Youth, Project PCU, Ministry of Water, Irrigation and Energy /MoWIE/, Regional and District offices

Soils: The farmers must ensure that no gullies or rills develop in the project area.

Vegetation: To make sure the local residents do not collect firewood excessively.

Loss of natural and cultural heritage: To protect some natural features, antics and relics in the project area, including chance finds.

Wildlife: Monitoring must be done to protect wild animals from being snared.

Marginal lands/fragile ecosystems: Marginal lands and fragile ecosystems must be protected against overuse.

Chemical pollution: In order to monitor the amount of pollutants in the soil or water, samples must be taken regularly from them for pollution testing.

Water resources: Both quality and quantity of water resources in the rivers must be properly managed for sustainable livestock management to persist.

Ambient air quality: All air polluting activities need to be checked regularly to minimize their effect on air quality.

Health of Construction Workers: Regular health checks of the work force/farmers are a way to monitor disease patterns.

Noise and Vibrations: Monitor noise levels from the machinery to ensure that it conforms to the limits recommended for noise levels.

Cultural and religious sites: monitoring if sub-projects affect the cultural and religious sites of the community

Table 10. Sub project monitoring schedule

Impact	Proposed mitigation measure	Implementation tool	Monitoring Indicators	Means of verification	Monitoring frequency	Responsibility
Air/noise pollution	<ul style="list-style-type: none"> • Use local routes away from sensitive areas • Site construction facilities away from sensitive areas • Use equipment fitted with abatement devices and good maintenance regime • Prohibit working at night working if possible • Observe seasonal sensitivities • Give due diligence for settlements/sensitive receptors 	<ul style="list-style-type: none"> • Part of contract agreement with contractor • Contractor's maintenance program or plan for equipment/ machinery 	<ul style="list-style-type: none"> • Contractors plan and report • Grievances recorded 	<ul style="list-style-type: none"> • Independent checks by project engineers and ESS • Maintenance records verified by project engineers and PMU • Self-check by Contractor 	<ul style="list-style-type: none"> • Construction stage 	<ul style="list-style-type: none"> • Contractor (s) and PMU
Water Pollution	<ul style="list-style-type: none"> • Control construction vehicles' movements and prohibit vehicle washing in watercourses, and similar practices • Do not hamper drainage of surface water; avoid works in areas prone to flooding especially during rainy season • Avoid over extraction of ground water in vegetable sub-projects • Reduce runoff through incorporation of fertilizer into soil, timing of applications to avoid erosive rains, and soil and water conservation measures 	<ul style="list-style-type: none"> • Industry-specific standards, particularly the Environment, Health and Safety (EHS) Guidelines • AfDB's OS-4 • Construction site management plans 	<ul style="list-style-type: none"> • Visibility of oil and other pollution materials on water bodies 	<ul style="list-style-type: none"> • Number of times oil and other polluting material seen on water bodies 	<ul style="list-style-type: none"> • Regular Monthly report • Occasional checks and observations by project engineers and PMU • Periodic reports on performance by Contractor 	<ul style="list-style-type: none"> • Contractor (s) and PMU
Solid waste generation and disposal	<ul style="list-style-type: none"> • Develop waste management plan including for hazardous waste; cleared vegetation, packaging, excess aggregate and disused equipment, etc. 	<ul style="list-style-type: none"> • Part of contract agreement with Contractor • Contractor's waste management plan; • Industry-specific standards, particularly the EHS Guidelines 	<ul style="list-style-type: none"> • Number of waste bins • Final disposal records 	<ul style="list-style-type: none"> • Periodic reports 	<ul style="list-style-type: none"> • Monthly 	<ul style="list-style-type: none"> • Contractor(s) and PMU
Loss, fragmentation and degradation of habitat, and severance of animal migration routes and	<ul style="list-style-type: none"> • Carefully locate all project components, with advice from conservation and wildlife specialists • Establish buffer zones around conservation areas, watercourses, and other locations identified as ecologically sensitive • Rehabilitate cleared areas with native species, and ecosystem restoration in habitats of conservation value • Develop a long-term monitoring program and corrective actions as 	<ul style="list-style-type: none"> • AfDB's OS-3 	<ul style="list-style-type: none"> • Presence of sensitive habitat Area rehabilitated 	<ul style="list-style-type: none"> • Activity report • Site visitation Reports 	<ul style="list-style-type: none"> • Pre-construction, and construction maintenance 	<ul style="list-style-type: none"> • Contractor and PMU

pathways	<ul style="list-style-type: none"> necessary 					
Impact on fauna	<ul style="list-style-type: none"> Demarcate and avoid areas of conservation interest 	<ul style="list-style-type: none"> AfDB's OS-3 	<ul style="list-style-type: none"> Presence of sensitive habitat 	<ul style="list-style-type: none"> Activity reports 	<ul style="list-style-type: none"> Construction 	<ul style="list-style-type: none"> Contractor/PMU
Marginalization of women and other vulnerable groups	<ul style="list-style-type: none"> Provide women and vulnerable groups specific interventions Target the women and other vulnerable groups in the allocation of Project resources and benefits 	<ul style="list-style-type: none"> ESMF 	<ul style="list-style-type: none"> Number of women benefiting from Project activities Number of women and other vulnerable groups trained 	<ul style="list-style-type: none"> baseline data and project implementation report 	<ul style="list-style-type: none"> During Project implementation 	<ul style="list-style-type: none"> PMU
Physical and economic displacement of people and assets	<ul style="list-style-type: none"> Avoid occupation of areas inhabited or regarded as of high value by communities (e.g., horticulture) where possible Develop and implement a resettlement action plan (RAP) in accordance with AfDB's OS-2 if properties and assets are affected by the Project operation 	<ul style="list-style-type: none"> AfDB's OS-2 	<ul style="list-style-type: none"> Number of people resettled 	<ul style="list-style-type: none"> Grievance report 	<ul style="list-style-type: none"> Before start of Project 	<ul style="list-style-type: none"> PMU
Interaction between workforce and local communities	<ul style="list-style-type: none"> Implement a health management system for the construction workforce, Carry out training and awareness training for the workforce and their dependents on COVID-19, HIV/AIDS and other sexually transmitted illnesses, and communicable diseases, including malaria Carry out health awareness-raising campaigns for communities on similar topics 	<ul style="list-style-type: none"> ESMF; Industry-specific standards, particularly the EHS Guidelines 	<ul style="list-style-type: none"> Health and safety incident register Grievance records Number of training and awareness sessions held Number of women and other vulnerable groups that participated 	<ul style="list-style-type: none"> Site visit and Observations by ESS/Contractor 	<ul style="list-style-type: none"> Construction and operation 	<ul style="list-style-type: none"> Contractor and PMU
Labor and working conditions	<ul style="list-style-type: none"> Employment practices and working conditions should conform to ILO standards and national regulations Institute a clear and comprehensive health and safety reporting and grievance procedure system freely available to all of the workforce 	<ul style="list-style-type: none"> Industry-specific standards, particularly the EHS Guidelines ESMF 	<ul style="list-style-type: none"> Comprehensive health and safety reporting and grievance procedure 	<ul style="list-style-type: none"> Periodic reports by performance ESS/Contractor 	<ul style="list-style-type: none"> Construction and operation 	<ul style="list-style-type: none"> Contractor and PMU
Economic Development and Employment	<ul style="list-style-type: none"> Contractor to develop an Employment Plan, with clear employment requirements and procedures for the construction and operational/ maintenance workforce Institute fair and transparent hiring and staff management procedures 	<ul style="list-style-type: none"> Industry-specific standards, particularly the EHS Guidelines ESMF 	<ul style="list-style-type: none"> Employment Plan 	<ul style="list-style-type: none"> Periodic reports by performance ESS/Contractor 	<ul style="list-style-type: none"> Construction and operation 	<ul style="list-style-type: none"> Contractor and PMU
Impacts on cultural heritage	<ul style="list-style-type: none"> Carefully select routes and siting of all project components, taking account of results of community consultations or specialist surveys Develop a Cultural Heritage Management Plan covering tangible and intangible (e.g. local traditions and practices) cultural heritage 	<ul style="list-style-type: none"> Cultural Heritage Management Plan Pre-construction surveys 	<ul style="list-style-type: none"> Cultural resources existing Number of infrastructures encountered Grievance and Incidence register 	<ul style="list-style-type: none"> Cultural Heritage Management Plan Periodic reports based on implementation of Plan 	<ul style="list-style-type: none"> Pre-construction and construction and repairs/recovery 	<ul style="list-style-type: none"> Contractor and PMU

8. Reporting Arrangements:

The Regional Project coordination units should prepare Generic Annual ES/Management Plan and submit it to FPCU. Accordingly, the Regional Project coordination units (RPCUs) are normally required to report Monthly, quarterly and annually on the performance of safeguards management integrated with the subproject activities. These reports should capture the experience with implementation of the ESMF procedures.

Local authorities are normally required to report monthly, quarterly and annually on their subproject activities during the preceding months, quarter and year, respectively. These quarter and annual reports should capture the experience with implementation of the ESMF procedures.

At Woreda level, month, quarter and annual uniform tabular report format proposed to be filled at Woreda level and completed by woreda Appraisal Team/MST and will be sent to regional EPFCCAs for compilation. Regional EPFCCAs will compile and send quarter and annual ESMF implementation report to the DRSLP-FPCU. Safeguard specialist at federal PCU will compile regional ESMF report and will send to the AfDB Bank for review and documentation.

The purpose of these reports is to provide:

- A record of experience and issues running from quarter-to-quarter/year-to-year throughout the subproject that can be used for identifying difficulties and improving performance; and
- Practical information for undertaking an annual review Quarterly and annual reports should be prepared at Woreda, regional and federal levels. Forms proposed to be filled by Woreda Appraisal Team/MST, regional EPFCCAs and federal safeguards specialist is attached in this ESMF

9. Implementation Responsibilities

Institutional arrangement describes the role and responsibilities of organizations that have a stake in the implementation of the ESMF. In Ethiopia, regions are autonomous and have the right to issue region specific laws and regulation which is more stringent than the federal one. As far as the proposed projects are concerned, Afar, Oromia, Somalia and SNNP regions have bureaus of environment responsible to oversee environmental and social impacts of programs and projects. However, projects which are simultaneously implemented in more than one regional boundary or which have impacts of trans regional nature are managed by federal level authorities (sector ministries).

9.1. Project Implementation Unit

The project implementation unit for the project will host in the Ministry of agriculture and should have safeguard specialist who will be responsible to:

- Recruitment of Environmental and Social Safeguard Expert (one for federal PIU I and One for each of the 4 regional program coordination office), who have adequate graduate training on the subject and experience to safeguard activities
- Screening and categorization of the project in collaboration with other relevant bureaus at the region (Woreda) level
- Preparation of Terms of References (ToR) for the recruitment of an independent consulting firm to prepare the ESIA and RAP (Resettlement action plan)(ARAP) reports if required,
- Monitoring the preparation of the reports as per the ToR,
- Supervision against the Environmental and Social management Plan,
- Ensure compensation are affected as per the newly issued proclamation
- Capacity building (deliver training) to the executing agencies at the region/Woreda& Keble level,
- Periodic reporting to the financiers,
- The PIU management will ensure allocation of adequate budget for the environmental and social activities execution based on approved plane.

9.2. Environment, Forest and Climate Change Commission (EFCCC)

The project implementation has various components executed in Afar, Oromia, Somalia and SNN National Regional States. If the environmental and social issues of the project are given to regional bureaus of environment it would be duplication of the same processes and activities and there will not be consistency in the process. Therefore, EFCCC will be mandated for the execution of social and environmental issues: to review screening report, decide categorization of the project, review of the ESIA reports and approval of the reports and conduct compliance monitoring against the ESMP. EFCCC can delegate the bureaus of environment of the four regions to supervise implementation of the ESMP.

9.3. Federal Sector Ministries

The implementation of the projects demands involvement of federal level ministries such as the Ministry of Agriculture, Ministry of Water, Irrigation and Energy, Ministry of Health, Ministry of Education, Ministry of peace, Ministry of Women, Child and Youth etc. Therefore, all of these stakeholders should oversee the overall implementation of this ESMF and subsequent ESIA. Furthermore, they should ensure that adequate resource (Finance, Manpower etc.) are allocated.

9.4. Regions Bureaus

The regional and Woreda level of bureau will have a cascaded mandate of the federal one and should follow the implementation of the ESMF and sub-projects who need to prepare and implement ESIA/ESMP. Being in close proximity with the project and responsible for effecting compensation, the region/Woreda level bureaus have huge mandate to avoiding possible delay.

9.5. Zonal, Woreda and Kebele

Zonal Level

To monitor and coordinate project activities at the woreda level, supervises issues that need to be resolved through regional sector offices or the DRSLP-II project coordination office Supervises issues that need to be addressed and monitors their timely resolution. In addition, it collects and consolidates reports from the woreda and transmits them to the regional and project offices.

Woreda Level

At woreda level, DRSLP woreda Steering Committee (WSC) comprising of relevant offices is established to review and approve annual work plans and budgets, review implementation reports and ensure multi-sectoral coordination. DRSLP Woreda Technical Committee (WTC) is also formed to give technical backstopping and supervision of the implementation of the program activities. The overall responsibility for supervision of the implementation of the ESMF will be that of office of IA. To this end, the DRSLP Regional coordination Unit (RCU) will allocate budget for beneficiary Woreda so that they could carry out ESMF implementation and compliance monitoring.

Each beneficiary woreda will assign /delegate as a focal person a qualified safeguards specialist who will be oversee the implementation of the ESMF. They are also responsible for monitoring and follow up, during ESMF implementation and prepare the documents and file it properly and report it to the region

Kebele level implementation

Kebele Development Committees (KDCs) at Kebele and sub-Kebele levels are responsible to follow up and supervise implementation of the ESMF. The safeguards specialists to be delegated or assigned by each beneficiary Woreda will assist in ES screening subprojects as well as in preparation of safeguards tools for subprojects whose risks are not high. The Kebele level Natural Resources Management Development Agent (DA) has the responsibility to ensure the implementation of the ESMF.

9.6. African Development Bank, Ethiopia Country Office

The AfDB is availing most of the finance required for implementation of the project. The safeguard wing of the AfDB is also responsible to ensure that the AfDB policies on Environment and Society are adequately addressed in the project implementation. Therefore, AfDB will be responsible to:

- Ensure the project passes through the national and bank safeguards policies.
- Compliance monitoring against the banks policies on safeguard,
- Capacity building for the implementing and executing agencies,
- Ensure that adequate resource (Finance, Manpower etc.) are allocated,
- Ensure compensations are affected as per the newly issued proclamation.

9.7. Collaboration with the Climate Commission for the Sahel Region (CCRS)

The CCRS is one of three Climate Commissions set up by the "Declaration of African Heads of State" following the "African Summit of Action for Continental Co-Emergence" organized on the margins of the Climate Change COP22 in December 2016 in Morocco. The others include the Congo Basin Commission and the Islands States Commission. Through the Heads of State Declaration in the December 2016 Summit, they confirmed their commitment to work collectively and in solidarity for a climate-resilient Africa that shapes its destiny through innovative approaches. As part of its operationalization, the CCRS has developed a Sahel Climate Investment Plan (PIC-RS 2018-2030). According to this context, the proposed project in the HoA is a specific response and a shared long-term vision for the resilience of the region's populations and ecosystems. To mitigate adverse impacts of environmental and social it works collaboratively by allocating resources for the implementation of the tasks listed below: -

- Restoration and rehabilitation of degraded land;
- Integrated water resource management;
- Sustainable management of agricultural and pastoral systems;
- Improvement of energy efficiency and access to clean energy;
- Development of communication and advocacy; and
- Capacity building.

10. Public Consultation and Engagement Guideline

For the successful identification and assessment of project specific environmental and social impacts, implementation and monitoring of the respective mitigation or enhancement measures and a continuous consultative process is required. Public consultation on projects is a key element emphasized in the Ethiopian constitution, in the Ethiopian environmental authority guidelines and also major part of AfDB Safeguards policy. The consultation should be with different stakeholders and particularly with project affected persons or groups (PAP). The outcomes of the consultation should also be part of the planning and implementation of the project.

HoA PIU and implementing sector bureau and offices at regional or woredas has the responsibility to engage stakeholders effectively in achieving the programs objectives for the benefit of all. Through consultations, the implementing bureaus and offices will create a bridge of communication between the public and the Government, which will improve the efficiency and transparency for the execution of the project. The following sections describe the public consultation plan, the principles, structure and public disclosure. Consultations and public participation are so the mandatory requirement by the legal and regulatory frameworks in most countries and a policy requirement by most development institutions. The processes facilitate understanding of the project and its impacts by the project beneficiaries.

During the process to prepare this ESMF there were limited consultations and public participation due to time and resource limitation. As such, it is anticipated that these processes will be carried out during the subsequent phases of the project development process especially during the appraisal of sub-projects. The public consultation and public participation process will inform the public, key stakeholders, interested partners and those to be affected by the project about the purpose and aims of the project and the key activities that will be carried out during the development and implementation phases of the

project. Possible impacts of the project are also discussed while soliciting inputs from the participants. Continued engagement with stakeholders and project beneficiaries facilitates regular communication and updates that enable modifications and alterations as well as implementation of proposed mitigation measures.

The purpose of stakeholder consultation and public participation include to provide accurate and comprehensive information about the proposed project and the anticipated environmental impacts to communities directly affected by the project; creating platform for the general public and project beneficiaries to provide their views as well as shared their projects specific concerns ; extending opportunity to local communities in suggesting ways of avoiding, reducing, or mitigating negative impacts or enhancing positive impacts of the proposed project activities; helps in incorporation of sub-project's the needs, preferences and values of project beneficiaries; proactively helps to avoid and reactively to resolve disputes and reconcile conflicting interests; and, it has overall objective of improving the transparency and accountability of HoA program implementation..

In order to effectively engage and consult various stakeholders, several methods are used. Among the most common methods are public consultative meetings, workshops, focus groups discussion, interviews with resource person, distribution of information through print and electronic media, discussion with community leaders, discussion with vulnerable communities that may be impacted on sub-projects including women, youth and elderly.

Check List for key issues to be covered during stakeholder engagements

Land acquisitions and compensation

Identification and securing any land acquisition for community based small scale sub-projects proposed by HoA Program including how to address any voluntary resettlement needed for the implementation of sub-projects.

Identification of ecologically sensitive sites

This will be with regard to identifying areas that are protected by national or regional state laws and international conventions

1. **Identification of important cultural sites:** Discussing with the local community if the proposed small-scale community driven projects site are real or perceived impacts on cultural sites in the area like cultural ritual sites, cemeteries
2. **Environmental impacts: Disclose** the anticipated benefits and adverse environmental impacts of sub-projects.
3. **Socio-economic considerations:** Detail description of the sub-project socio-economic benefits and anticipated adverse social impacts
4. **Socio-cultural issues:** Sub-project risk and issues including consideration of gender mainstreaming, women and youth empowerments, identification of vulnerable groups such as poor women, the elderly, the people with disabilities, spreading of diseases (especially HIV/AIDS and other communicable diseases as well as noncommunicable disease are of utmost consideration), improvement of life quality/living standards, etc.
5. **Disruption of normal life:** Is the project going to interference with and disrupt daily economic activities such as closure of roads, change in normal lifestyles, etc.

6. **Occupational health and safety:** Possible occupational health challenges and safety of workers during the project development phase as well as operational phase are of great importance.
7. **Cumulative impacts:** During stakeholder engagements and public consultations, issues such as possible trans boundary impacts of the project may be reviewed. Cumulative impacts such contribution to changes in climatic conditions.
8. **Bank requirements:** Communicating with the people the minimum Bank safeguards requirements with non-technical terms including the need for sub-projects to have broad community support and the need to disclosure of adequate project information to ensure that community are fully informed.

11. Grievance Redress Mechanism - GRM

Project implementation may be a source of grievance. Grievance may be during construction, compensation, payment modality, pollution, resource use conflict etc. The government of Ethiopia has a system of addressing grievances using the Ethiopian Ombudsman Institution and Public Grievance Hearing Offices (PGHO) at all levels of the decentralized administration. A 'grievance' is a perceived injustice evoking an individual's or a group's sense of entitlement, which may be based on law, contract, explicit or implicit promises, customary practice, or general notions of fairness of aggrieved communities. In effect it could be either perceived or actual issue, concern, problem, or claim that an individual or community group wants a project or contractor to resolve. Grievance related exercise include questions, requests for information, or general perceptions that may or may not be related to a specific impact or incident. If not addressed to the satisfaction of the person or group sensed it, concerns may well become complaints, and will lead to a loss in the projects to operate or failure for successful delivery of the intended development goal of the project.

Emerging trends toward the project shall be identified and addressed through community engagement before they escalate. Complaints or grievances including all allegations of specific incidents and of any damage, impact or dissatisfaction resulting from projects or contractor actions, whether perceived or actual should be identified, documented and addressed properly.

Good practice in environmental and social performance of projects required the implementation of feedback mechanisms to enable stakeholders to provide input and to make the community being heard for any grievance developed during the project. To materialize this project needs to have participatory and culture friendly grievance mechanism. In line with this fact a Grievance Redress Mechanism will be implemented to ensure that all complaints from local communities are dealt with appropriately, with corrective actions being implemented, and the complainant is informed of the outcome. It will be applied to all complaints from affected parties. It will provide a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Concerns will be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of affected communities, at no cost and without retribution. GRM should be appropriate to the scale of impacts and risks presented by a project.

Grievance Resolution Committee (GRC)

In view of the above, a Grievance Resolution Committee (GRC) shall be set up by the PMU at woreda level to inform and coordinate the relevant stakeholders and to provide resources for resolution activities. The Committee will maintain all records from complaint to final decision for future reference. It will also ensure that public participation and consultation is always a part of the process to promote understanding and prevent unnecessary complaints and disputes. The GRC will be mandated to deal with all types of grievances arising at the community level due to the proposed project and its sub-projects. The GRC members shall be comprised of qualified, experienced, and competent personnel who will be able to interact and gain the trust of the complainants in the local communities. The GRC should consist of both male and female representatives. They should be able to accept complaints, provide relevant information on the process, discuss the complainants' situations with the concerned person, and explore possible approaches for resolution.

There is a need for clear standard procedure and plan of how to register (how, where, and when) grievance and this GRM shall be disseminated within the project implementation level with focuses to communities at Kebele and Woredas where for concerns/grievances of the program are expected to be presented due its size of the proposed intervention and site specificity of the activities. When affected or concerned persons present their grievance, they expect to be heard and taken seriously so woreda and Kebele levels project stakeholders, particularly safeguard experts or focal persons are required to inform the project GRM system and provide adequate information to people that they can voice their grievances without fear of any perceived retaliation. The received complaint has to be documented in writing using a standard format containing specific time plan for resolving conflict/complaint. After registration using standard format it should be examined; investigated and remedial actions shall be taken.

Proposed GRM procedure

1. The affected or concerned person files his/her grievance, relating to any issue associated with the DRSLP II (HOA) activities in writing or phone to the focal person.
2. If the concerned person is unable to write, the safeguard or focal person will assist on write the note on the aggrieved person's behalf.
3. Any grievances reported should be documented.
4. At the local level (kebele), kebele administrators will play a key role in managing complaints and disputes in close collaboration with the assigned project staffs at woredas.
5. Kebele administrators should get brief explanation on the environmental and social safeguard issues and GRM procedures by the woreda grievance focal person.
6. grievance registration form should contain a record of the person responsible for an individual complaint, date for the complaint reported; date the grievance logged; date of proposed corrective action sent to complainant (if appropriate), the date the complaint was closed out and the date response was sent to complainant.
7. The Kebele, Woreda and regions should have a record of complaint lodger keep a journal with recording all grievances, date and results of the closure with all supporting documents available including logging forms and decision minutes.

8. The responsible safeguard or focal person need to ensure for each complaint has a reference number, appropriately tracked and recorded actions are completed.
9. The response to resolve for any grievance logged depend on magnitude of the issue to be addressed but in generality it should be addressed within shortest time three weeks as maximum time for cases need decision at regional or federal level and every grievance shall be solved with compliant satisfaction.

GRM Process Flow

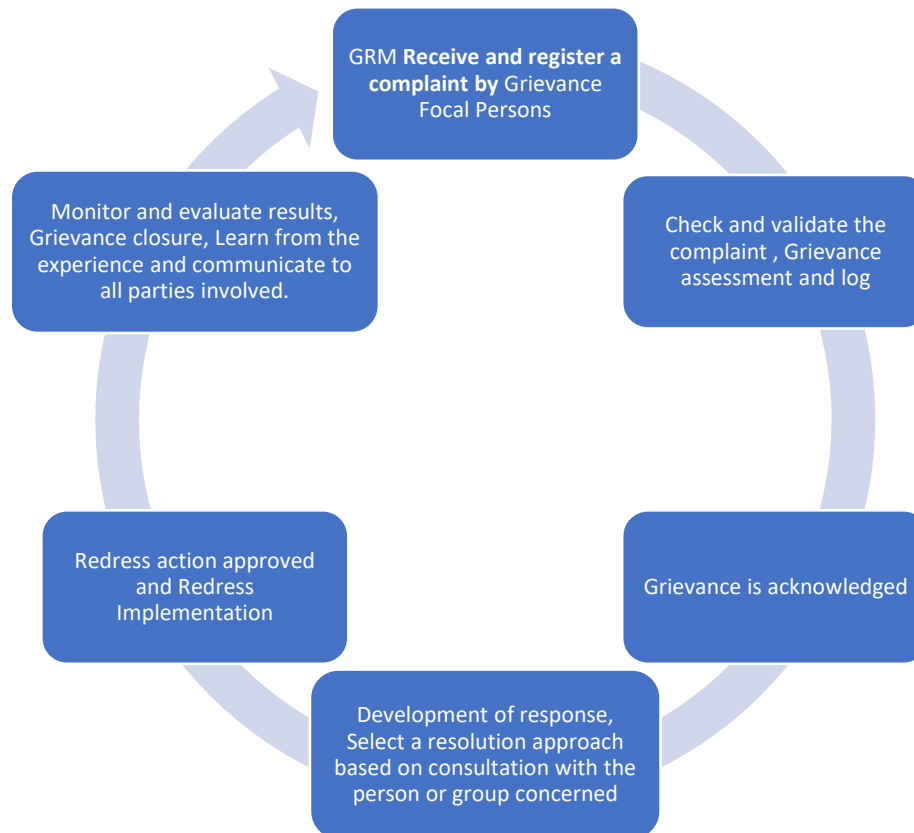


Figure 4: GRM Process Flow

12. Capacity Building

The capacity building training plan will be developed to (i) enhance the capacity of all implementing entities mainly at woreda and zone levels, and at regional level to be able to implement and monitor the execution of the safeguards instruments, and (ii) to enhance capacity of community level public administrative structures and community-based institutions to monitor the implementation of the

safeguards instruments. As the need is indicated by the Performance Reviews or M&E activities, refresher courses will also be prepared and delivered during HoA Program life. Parallel to this, capacity-buildings trainings focusing on the following major aspects, among others, should be provided for project implementers at Federal, regional, Woreda and Kebele levels: -

12.1. Technical capacity building

- 1) Design and operationalization of Grievances Redress Mechanism.
- 2) COVID prevention for program stakeholders.
- 3) Development of a Manual of good environmental practices and safety standards for the program stakeholders.
- 4) Training on environmental and social safeguards, Environmental and Social Assessment Tools (Environmental and Social Impact Studies, Environmental and Social Management Plan, Environmental Audit, etc.) to actors who are responsible for ensuring the integration of the environmental and social safeguards of sub-projects (ESS expert, Monitoring and evaluation expert, Procurement expert, etc.). The training involved in the management of environmental and social safeguards on the ISS of the AfDB and Ethiopia safeguards policies and procedures for environmental and social.
- 5) Training on prevention and management of cross border conflict using customary and forma laws and traditional institutions in pastoral and agro pastoral areas.
- 6) Gender mainstreaming in HoA program.
- 7) Cross border conflict management.

The training should give special attention should be given to Woreda focal person, Environmental experts at woreda level, woreda Administration and other stakeholders from Pastoral, agriculture and livestock development bureaus, water bureaus environmental protection authority, etc., that will be involved in the screening of the sub-projects for the effective implementation of Environmental and social safeguards.

12.2. Institutional strengthening measures

For effective implementation of the ESMF, RPF and SA, technical assistance is required at Federal, region, Woreda and local (Kebele) level to build the capacity of the local communities, Development Agents/Das/, Woreda, zone and region government staffs to discharge their responsibilities as per the requirements set out in this ESMF.

1. Recruit an environmental and social safeguard specialist for federal PIU and one for each of the four regional PIU, and appointment of Safeguard focal person for each program implementing woreda that will report to woreda project coordinator and regional safeguard specialist. The budget for this task will be part of HoA program component four. The safeguard specialist tasks will include
 - Assist in environmental and social screening task
 - Choice of mitigation measures
 - Preparation of the draft ToR for sub-projects requiring separate ESIA
 - Assist in the recruitment of qualified consultants to carry out EISA
 - Sharing of HoA safeguards activities and reports to appropriate institutions
 - Conduct of environmental and social monitoring and learning for the program
 - Organize capacity building training and experience sharing on environmental and social safeguards tools to program implementation staffs and relevant stakeholders.

2. Program partnership and collaboration agreements with federal and regional institutions in charge of oversee environmental and social impacts and assessment of development projects.
3. Mainstreaming environmental and social management into HoA program to integrate the tools and recommendations of the safeguard documents into the manuals and management procedures and in the preparation of program and sub-project budget. This would strengthen inclusion of legislative, regulatory and institutional frameworks in HoA management and support procedures.
4. Updating the ESMF (program, schedule and budget): At federal and regional level there is a need for some flexibility for adapting the ESMF of the project to changing context and reality to reflect the changes in the program, budget and the implementation schedule.
5. Organizing ESMF best practice and lesson sharing with stakeholders as well as with other projects implemented by the public and NGO in similar thematic and context. Since program safeguards is an emerging subject that could be developed further with creating and attending experience sharing process among different institutions to ensure the restitution, sharing and dissemination of the ESMF to the various stakeholders; have a common understanding of the recommendations of the ESMF; better clarify the institutional arrangements and the responsibilities of each actor; to agree on the methods and tools for applying the ESMF; and identify and propose all decisions, measures or reforms that could facilitate the achievement of the objectives of the ESMF.
6. Adoption by the project of the Codes of conduct and action plan for the implementation of Environmental and social, health and safety (ESHS) and occupational health and safety (OHS) standards and the prevention of violence based on gender (GBV) and violence against children (VAC). This measure involves getting the project to adopt a set of key definitions, codes of conduct and guidelines in order to: (i) clearly define the obligations of all project staff (including subcontractors and labourers) concerning the implementation of environmental, social, health and safety (ESHS) and occupational health and safety (OHS) standards; and (ii) to help prevent, identify and combat GBV and VAC on the site and in neighboring communities. The application of these Codes of Conduct will make it possible to ensure that the project meets its objectives in terms of ESHS and OHS standards, as well as to prevent and / or mitigate the risks of GBV and VAC on the project site and in the local communities. The people working in the project must adopt these Codes of Conduct which aims to: - Raise awareness among staff operating in the project of ESHS and OHS expectations; and - Create awareness about GBV and VAC, and: - Create a consensus on the fact that such acts have no place in the project; and Establish a protocol to identify incidents of GBV and VAC; and to proactively manage to such incidents.

13. ESMF Implementation Institutional Arrangement

Table 9: ESMF Implementation Institutional Arrangement

Activities	Responsible	Collaboration With	Service Provider
Identification of sites for sub-projects	technical staff and coordinators	woreda administration and staff	Consultants or design offices
Screening-filling of forms and determination of safeguard instrument	HoA safeguard expert and focal person	regional or woreda environmental expert	Consultants or design offices and safeguard expert
Approval of environmental categorization	project coordinator	safeguard expert	Federal and regional environmental protection offices
preparation and approval of ToR	safeguard expert	PCU	AfDB and National EIA
Carrying out the study including public consultation	safeguard expert	PCU	AfDB and National EIA
Publication of the document	safeguard expert	PCU	Media of AfDB and Ethiopia
Integration of environmental and social tender clause documents of subprojects	Procurement	safeguard expert	
Implementation of mitigation measures not contracted with the construction	Safeguard expert and focal person		
Internal monitoring of the implementation of environmental and social measures	Safeguard	PCU	National Agency in charge of the country's environmental assessment
Diffusion of safeguard report	PCU Coordinator	safeguard expert and focal person ESSS	safeguard expert
environmental and social monitoring	Safeguard expert and focal person	PCU and Environment protection	
capacity building to stakeholders	Safeguard expert	PCU	consultant
Audit of the implementation of environmental and social measures	Safeguard expert and focal person	PCU and Environment protection	Consultant and design office

14. Contract Clauses

Environmental and social measures for the management of project suppliers and service providers: The HoA program shall require that all suppliers and service providers involved in the sub-project comply with the provisions of the AfDB's and Ethiopia environmental and social safeguard policy and standards. To this effect it is needed to:

- 1) assess the environmental and social risks and effects associated with their supplier and service contracts;
- 2) ensure that the suppliers and contractors involved in the project are legitimate and reliable companies, and have the knowledge and skills necessary to perform the tasks of the project in accordance with their contractual commitments;
- 3) integrate the important considerations of environmental and social risk management in the tender documents;
- 4) contractually requiring suppliers and service providers to apply the relevant aspects of environmental and social risk management and, in the event of non-compliance, to take appropriate corrective measures;
- 5) ensure that suppliers and service providers comply with their contractual commitments; and
- 6) require, in the event of subcontracting, that suppliers and service providers enter into equivalent contracts with their subcontractors to full fill the environmental and safeguards policy of the Bank and the country.

15.ESMF Monitoring

Monitoring is a key component of the ESMF during the Project implementation. Monitoring will be done by PCU at all level and by the regulatory agency. HoA program environmental and social monitoring mission will be used to verify and assess the effectiveness, efficiency and effectiveness of the implementation of the environmental and social mitigation measures under ESMF and prospective sub-projects ESMP to be adopted in the implementation of different sub-projects under the program framework. Environmental and social monitoring used to tune and regulating the sub-project impact predictions; prevention, mitigation and compensation measures are relevant to sub-projects; international and national environmental and social regulations and standards are respected. Environmental monitoring shall be carried out as part of the overall monitoring system for project activities using environmental and social indicators. The environmental and social monitoring will be done by the program ESS expert at national and regional PIU and the inputs will be aggregated in the overall program monitoring and evaluation process.

15.1. Environmental and Social Monitoring Indicators

Monitoring indicators developed for the program ESMF and sub-project indicators from prospective ESIA will help in the implementation of mitigation measures, monitoring and evaluation of the program and sub-projects in order to assess the effectiveness of its activities. These indicators will be regularly monitored during the setting up and progress of the sub-projects and will be incorporated into the project monitoring system.

Table 10: ESMF Indicators

Measures	Areas of intervention	Indicators	Schedule
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Technical measures	Recruitment of the Environmental and social safeguards expert	Recruitment report	First quarter of the first year of HoA implementation
	Environmental selection (Screening) of the activities of different under- project projects	Number of sub-projects passed through screening	starting from Second quarter of the first year
	ESIA for Sub-projects subjected for the assessment	Number of ESIA recommended during screening and number of ESIA performed	before the start of the sub-projects recommended for ESIA
Monitoring and evaluation	safeguard Inspection and monitoring	Number of monitoring mission done	Quarterly per year
Training	training on environmental and social safeguards, evaluation and monitoring of sub-projects	Number of Training, Number of Trainee and Trainee Types	during the first three years
Safeguards Sensitization	Sensitization and advocacy on the environmental and social safeguards and best practices	number of sessions organized, number and profile of people participated	first year and last year
	Dissemination of ESMF and Safeguard guides to stakeholders	Number of Reports Dispatched, Number of stakeholders received the documents	throughout the project cycle
GRM	Implementation and Grievance redress mechanism	Availability of GRM database at federal, regional and woreda PIU, Presence of GRM structure at sub-project level, Number of complaints received / number of complaints processed and closed	Throughout the project cycle

15.2. Timetable for the implementation of ESMF HoA program

Table 11: Timetable for the implementation of ESMF HoA program

Measures	Actions	Achievement Period
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		Year 1	Year 2	Year 3	Year 4	Year 5
Sub-project mitigation measures	All mitigation Measures proposed for sub-projects					
Institutional measures	Recruitment of environmental protection specialists and social					
	Update of the ESMF (program, schedule and budget)					
Technical measures	Realization of ESIA's for certain sub-projects of the project					
	Development of manual environmental practices and of safety standards					
	Drafting of clauses for environmental and social to be included in the bidding documents					
Training	Training of environmental focal points in environmental assessment and social assessment					
Sensitization	Stakeholder awareness and mobilization					
Monitoring	Environmental and social monitoring and surveillance of sub-projects					
	Mid-term ESMP evaluation					
	Final ESMP assessment					

16. Cost Estimate and Sources of Funds

- the budget that will be used to pay consultants to carry out ESIA studies and to implement recommendations will be part of the sub-project budget

Costs of activities to implement the environmental and social measures of the project

Table 12: ESMF Budget

No.	Activity	Unit	Quantity	Local	US \$
1	Mitigation cost for sub projects total from ESMF plan/				1,158,690.00
1.1	Recruitment of Environmental and Social Safeguard Expert	Numb	5		27800.00
1.2	Implementation of partnership agreements with regional safeguard oversee institutions	No	4		82500.00
1.3	Design of Complaints Management Mechanisms (Stakeholders and project workers)	1			18250.00
	ESMF best practice sharing	1			90000.00
	Development of a Manual of good environmental practices and safety standards	1			22250.00
	Development of a COVID prevention guide for project stakeholders	1			10250.00
	Training on environmental and social safeguards	1			739420.00

	Provision for the realization of ESIA / ESMP/	Lamp Sum			95250.00
	Mid-term audit of the implementation of the ESMF				18260.00
	Final audit of the implementation of the ESMF	1			16250.00
	Mid-term ESMP evaluation	1			1 8260.00
	Final ESMP assessment	1			20200.00

17. Conclusion

The fundamental objective of HoA Ethiopia ESMF was to provide guideline to identify, screen, approve and safeguards sub projects to be remained in Category II and its anticipated adverse effects are managed. Therefore the overall environmental and social performance of the HoA program can be enhanced. The ESMF would give due emphasis and concern for multi-purpose infrastructure and medium-scale sub-projects its location is not identified to detect its area of influence. Accordingly, generic mitigation strategies, capacity building plans, monitoring and evaluation of ESMP are put in place.

In general, the Ethiopia HoA (DSRLP-II) construction and operation of small scale and community based sub-project would have expected to have more beneficial impacts than adverse impacts. The HoA program aims to addressing the negative impact of recurrent drought and climate change in the Horn of Africa (HoA) Region; and its primary goal is to contribute to poverty reduction, increase food and nutrition security, build drought resilience and accelerate sustainable economic growth among the pastoral and agro-pastoral communities in the HoA region including Ethiopia. The program has 4 components and 9 sub-components followed by major activities and sub-activities to achieve abovementioned overall and specific objectives.

The various sub-projects proposed to improve the living conditions of the populations and food and nutritional security in selected program intervention areas across the four administrative regions.

18. Disclosure Policies and Procedures

This ESMF will be disclosed at AfDB external website and at the Government's website to make it accessible to any person interested to refer this document. The Ministry of Agriculture will also distribute this document to relevant government institutions. The executive summary of the document will be translated into Ethiopia local language in the four-project region and publicly disclosed.

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Annex 1: Environmental Screening Form for Checklist of Likely Environmental and Social Impacts of Sub-Projects.

Project number:

Sub-Project type:

Name of woreda sub-project implemented

Name of Kebele sub-project implemented

Name of Executing Agent:

Date:

Name of the Approving Authority:

PART A: BRIEF DESCRIPTION OF THE PROPOSED ACTIVITIES

Please provide brief information on the project

Please provide information regarding actions needed during the construction of facilities including support/ancillary structures and activities required to build them, e.g. need for borrow pits, access roads, campsites etc.

Please describe how the construction/rehabilitation activities will be carried out, including complementary activities and infrastructures and resources required e.g., roads, and traffic routes, disposal sites (waste and removed materials), water supply, energy requirement, storage areas, human resources, worker camps, security arrangements, etc.

PART B: BRIEF DESCRIPTION OF THE ENVIRONMENTAL SITUATION AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL IMPACTS

Name, job title, and contact details of the person responsible for filling the Form:

Name:

Job title:

Telephone numbers

E-mail address:

Date:

Signature:

Please describe the proposed infrastructures location, sitting, coordinates; surroundings (include a map of the sub-region as well as a detailed area map of the project and its ancillary facilities, and their immediate surroundings).

Describe the land formation, topography, vegetation in/adjacent to the activity areas (project and ancillary facilities/activities).

Estimate and indicate where vegetation might need to be cleared, erosion and drainage issues might occur.

Sub-project Risk Impact Screening Table

Table 13: Sub-project Risk Impact Screening Table

	Environmental and Social aspect	yes	no	Not
1	Is the site zoned for the proposed land-use?			
2	Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?			
3	Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?			
4	Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?			
5	Is there any surface water courses?			
6	Is there any natural springs?			
7	Is the water table close to the surface? i.e. 0,5 m or less?			
8	Are there any wetlands (lakes, swamp, seasonally inundated areas) in the proximity of the site?			
9	Is the project located near the coast? If so near any marine reserve area?			
10	Is there any area of high biodiversity or high conservation value?			
11	Are there habitats of endangered/threatened or rare species for which protection is required under national law/local law and/or international agreements			
12	Is there a possibility that, due to construction/rehabilitation works and subsequent operation of the infrastructure, the river and lake ecology will be negatively affected with regards to its water quality and quantity?			
13	Is the site (or its complementary facilities) located within/adjacent to any protected areas designated by the government or international agreement (national park, national reserve, world heritage site etc.)?			
14	Is the project likely to alter any historical, archaeological, cultural heritage traditional (sacred, ritual area) site or require			
15	excavation or other significant disruption near same?			
16	Will the project involve any land acquisition?			
17	Will any such land acquisition be affected through voluntary donations?			
18	Will the activities be located in any vacant public land?			
19	Under any of the types of land acquisition above are there any current uses or activities on the land proposed to be acquired?			
20	Any formal or informal occupation?			
21	Is the project located in any or near polluted area (near a waste dump or any industrial facility)?			
22	Is the project located in an area of steep slope and or susceptible to landslides or erosion of soils?			
23	Is the project located in or near to agricultural land? Including seasonal,			

	recession, or sporadic agriculture?			
24	Is the project located in the proximities of tourism activities?			
25	Is the project site susceptible to natural disasters (flooding, fire, cyclones and earth quake)?			
26	Is the project located in area of population concentration points (schools, markets, health facilities, churches, office buildings, water sources and commercial areas, transportation hubs)?			
27	Will the construction/rehabilitation activities including support facilities result in the permanent or temporary loss of crops, fruit trees and household or livelihood related infra-structure (such as granaries, outside toilets and kitchens, livestock grazing and watering areas, irrigation canals, wells and water sources)?			
28	Will the construction/rehabilitation activities including support facilities interfere with employment, livelihood activities, markets or formal or informal commercial activities including street vendors and similar?			
29	Will the construction/rehabilitation works interfere with or block access, routes etc. (for people, livestock and wildlife) or traffic routing flaw			
30	Will the construction or operating noise or vibration level exceed the allowable/safe noise/vibration limits?			
31	Will the construction/rehabilitation works require large number of staff and labourers as compared to the size of the communities? Large construction camp? Overnight worker accommodations for extended periods?			
32	Will the activities result in emission of significant amounts of dust, hazardous fumes?			
33	Will the activities decrease traffic or personal safety in their immediacy or beyond? during construction and/or operation			
34	Will the construction/rehabilitation works generate solid or liquid wastes? (including human excreta/sewage, asbestos,)			
35	adequate collection and disposal, particularly asbestos?			
36	Are the construction/rehabilitation activities prone to hazards, risks and could they result in accidents and injuries to workers or nearby communities during construction or operation?			
37	Will the operation involve use of considerable amounts of natural resources (construction materials, water, land, energy from biomass etc.) or may lead to their depletion or degradation at points of source or discharge?			
38	Has public consultation and participation been sought?			
39	Will the project interfere with community (households) access to water, firewood, medicinal and food plants, hunting or fishing resources, and other natural resources in general that support food security or livelihood activities?			
40	Will the community participate in work opportunities or receive any benefits from the project?			
41	Is the community highly vulnerable?			
42	Will there be clearance of trees?			
43	Will there be any significant quantities of aggregates to be purchased from loan chambers or quarries)?			
44	Will there be production of domestic / sanitary wastewater (campsite, offices,			

	dormitories, etc.)?			
45	Is the project located close to water sources for the community (fountains, wells, boreholes, etc.)?			
46	Is there a likelihood of an increased incidence of cases of diseases related to water accumulations (malaria, etc.)?			
47	Will the project cause proportionally greater negative impacts on vulnerable groups, such as the poor, children, the elderly, women, people with disabilities?			
48	Is there knowledge of situations or prevalence of Gender Based Violence (GBV), child labour, forced labour or sexual abuse and exploitation in the project area?			
49	Will there be an increase in the occurrence of Gender Based Violence (GBV), child labour, forced labour or sexual abuse and exploitation, due to the project and the necessary workforce?			
50	Is there a likelihood of an increased incidence of HIV / AIDS cases?			
51	Will heavy equipment and machinery be used?			
52	Is the community conflictive?			
53	Is the community known to be opposed to the project or similar activities?			

PART D: MITIGATION MEASURES

For each of the yes responses in the above screening form , please briefly describe the nature and scope of the impacts and the mitigation measures proposed to be taken to address them.

PART E: SCREENING RESULTS

The sub-project identifies as anticipated sub-projects of Ethiopia HoA program as Category II project. Therefore, the subprojects are likely to be categorized under schedule two of Ethiopian EIA guideline.

Eligibly for funding by HoA Program

YES

NO

If No, state reason and recommend needed for revision of design

Sub-project Requirements (check)

ESMP

ESIA/ESMP

Annex 2: ESIA Study and Report Outline

ESIA is the document produced after studying the potential environmental impacts of a proposed sub-projects. The report will provide all relevant details on the project and its effect on the environment. This document should provide a summary level of detail adequate to allow the average reader to make an informed decision on the project. This document will include a broad range of data, including information on the developer, schedule, and the detailed description of the project, regulatory framework, and review of alternatives, environmental management plans, socioeconomic factors, environmental impacts, mitigation, monitoring, and reclamation.

The completion of the ESIA report requires gathering necessary resource information, conducting field investigations, and using scientific methods to evaluate potential interactions between the environment and activities associated with the undertaking. The report would be accompanied by supporting appendices, the baseline study report, and the environmental and social assessment that will provide technical detail on specific issues, assumptions, and modeling projections.

An ESIA must be done with professional with expertise in environmental and social issues of specific concern. The ESIA should be prepared in a well-organized document in order to provide reviewers with enough information to understand what is being proposed and the environment in which the project is to be located. The ESIA could be achieved by an independent consulting firm.

Contents of the ESIA Report

The Environmental and Social Impact Assessment (ESIA) report should contain a brief introduction explaining the need for the conduct of the project. There may be other applicable criteria of the project that may have to be reviewed. However, in order to avoid delay in the review process, the proponent should ensure that all sections listed below are included in the report.

1. Executive summary
2. Introduction or overview of the project
3. Policy, legal and administrative framework
4. Detailed project description
5. Description of the potentially affected Environment and social issues
6. Environmental Management Plan and Mitigation Measures
7. Identification of Alternatives
8. Project Baseline
9. Environmental Management and Training
10. Monitoring Program
11. Public Participation
12. Expected Residual Effects
13. An indication of any difficulty encountered in the ESIA
14. Summary of Public Consultations and the Opinions Expressed
15. ESMP, including Management Measures, Actions, Roles and Responsibilities, Timeframes, Monitoring and Cost of Implementation

16. Conclusion and Recommendations

17. List of References

18. Annexes

Annex 3: List of Project woredas

1. Proposed Intervention Site Districts for Program to Build Resilience for Food and Nutrition Security in The Horn of Africa (HoA) - Ethiopia Component / DRSLP phase-I and II project intervention Woredas

Afar Regional:	Somali Regional:	Oromia Region:	SNNP Region:
2. Adaar,	1. Araarso,	1. Arero,	1. Bena tsemay,
3. Afdera,	2. Birqod,	2. Dhas,	2. Decha
4. Bure Modaytu /Gela'alo	3. Qebridgehar,	3. Melka Soda	3. Male
5. Elidaar,	4. Marsin,	4. Dugda Dawa	4. Bero,
6. Erubti,	5. Raaso,	5. Seba Boru,	5. Maji,
7. Hadelela.	6. Mubarek,	6. Liben,	6. Meinit shasha
	7. Goljano,	7. Goro Dolla	7. Meinit Goldia
	8. Qubi	8. Girja	
	9. Hadagala.		

Annex 4: IGAD Cross Border Cluster.

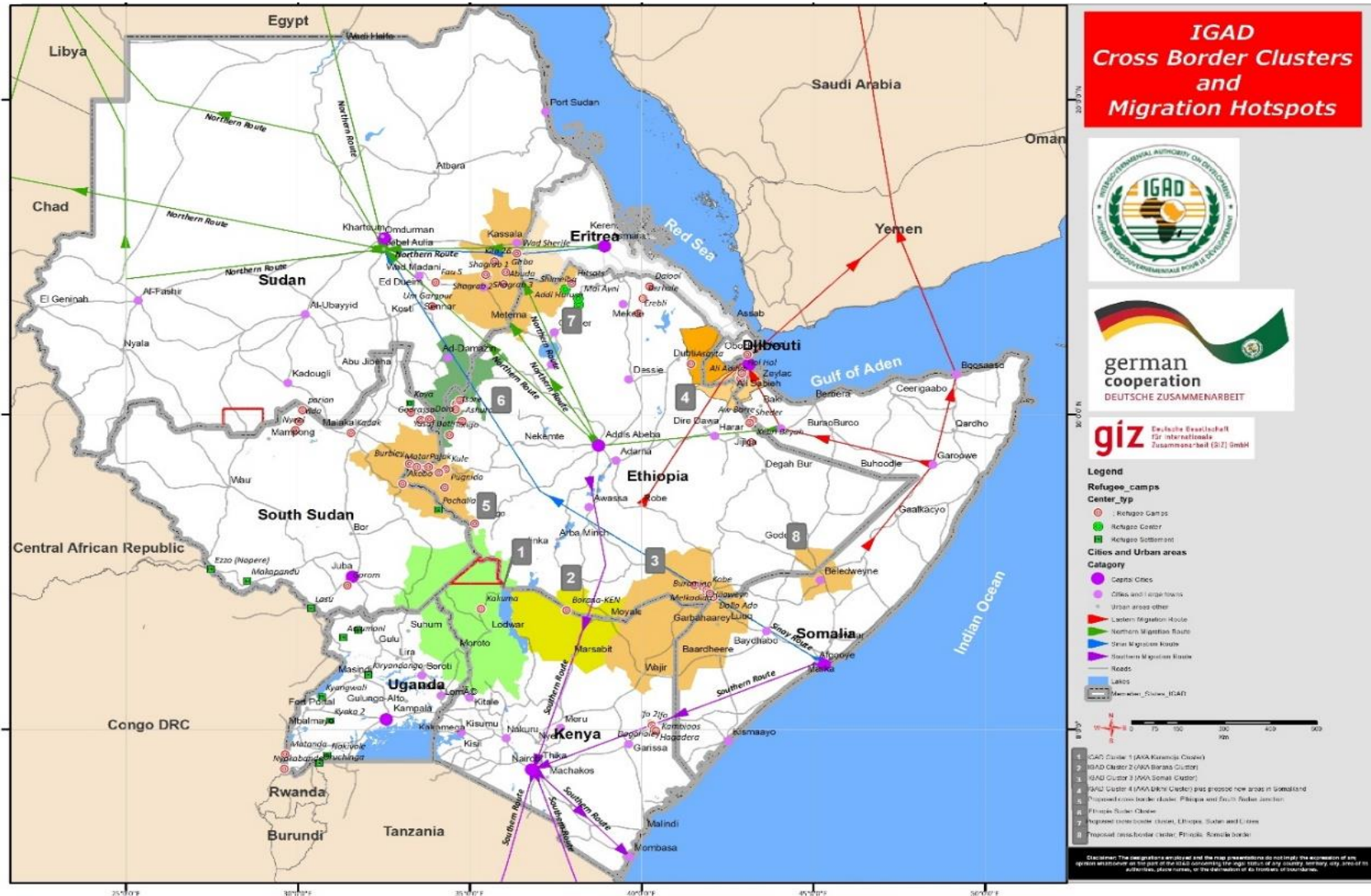


Figure 5: Map of IGAD cross border clusters and migration hotspots Area, IGAD member countries

Annex 5: List of contacts consulted and interviewed at federal, regional and woreda level

Table 14: List of contacts consulted and interviewed at federal, regional and woreda level

No	Name	Region	Zone	District	Affiliation	Position	Contact
1	Mr. Mitiku Tamiru	SNNP	-	-	Pastoral Development and Special Support Affairs Bureau	Head, Bureau	Tel. 0916 581 289, Hawassa
2	Mr. Azene Adasho	SNNP	-	-	Pastoral Development and Special Support Affairs Bureau	Deputy Head, Bureau	Tel. 0911 991 948, Hawassa
3	Mr. Seyoum Metaferia	SNNP	-	-	Regional DRSLP Coordination Office	Coordinator	Tel. 0911 392 442, Hawassa
4	Mr. Zenebe Zerihun	SNNP	-	-	Regional DRSLP Coordination Office	DRSLP Livestock Expert	Tel. 0911 035 123, Hawassa
5	Mr. Simret Teklil	SNNP	-	-	Regional DRSLP Coordination Office	DRSLP Livelihood Expert	Hawassa
6	Mr. Wosenu Mekonen	SNNP	South Omo	-	DRSLP Zonal Mobile Support Team Coordinator	Coordinator, ZMS Team	Tel. 0916 712 208, Jinka
7	Mr. Getachew Gelmo	SNNP	South Omo	Male	Pastoral Development and Special Support Affairs Bureau	Head, Bureau	Lemo Gento
8	Mr. Abraham Worku	SNNP	South Omo	Male	DRSLP Coordination Office	Head of Office	Tel. 0916 714 086, Lemo Gento
9	Mr. Arkerich Weyisol	SNNP	South Omo	Dasenech	Pastoral Development and Special Support Affairs Bureau	Head, Bureau	Tel. 092 648 8219, Omorate
10	Mr. Issa Mohamed	SNNP	South Omo	Dasenech	Pastoral Development and Special Support Affairs Bureau	Bureau's Awareness Raising Expert	Tel. 0915 Omorate
11	Mr. Roba Turcha	Oromia	-	-	Regional Pastoral Development Commission	Commissioner	Tel. 0918 989 670, Addis Ababa
12	Mr. Mohamed Jilo	Oromia	-	-	Regional Pastoral Development Commission	Deputy Commissioner	Tel. 0913 544 218, Addis Ababa
13	Mr. Ibsa yusuf	Oromia	-	-	Regional Pastoral Development Commission	Advisor to the Commissioner	Tel. 0910 337 339, Addis Ababa
14	Mr. Ayele Kene'a	Oromia	-	-	DRSLP Coordination Office	Head of Office	Tel. 0943 159 883 Addis Ababa
15	Mr. Jaldesa Huka	Oromia	Borena	-	Pastoral Development Commission	Head of Office	Yabello
16	Mr. Bule Boru	Oromia	Borena	-	DRSLP Zonal Mobile Support Team	Coordinator	Yabello
17	Mr. Boneya Wario	Oromia	West Guji	Dugda Dawa	District Administration Office	Deputy Head	Finchawa

18	Mr. Bali Wata	Oromia	West Guji	Dugda Dawa	Pastoral Development Commission	Deputy Head	Finchawa
19	Mrs. Shubichu Kebu	Oromia	West Guji	Dugda Dawa	Women Affairs Bureau	Head of Bureau	Finchawa
20	Mr. Galma Liben	Oromia	West Guji	Dugda Dawa	DRSLP Coordination Office	Coordinator	Finchawa
21	Mr. Tukale Wario	Oromia	West Guji	Dillo	District Administration Office	Deputy Head	Tel. 0922 181 038, Dillo
22	Mr. Sora Guyo	Oromia	West guji	Dillo	Pastoral Development Commission	Head of Bureau	Tel. Dillo
23	Dr. Befkadu Mamo	Afar	-	-	DRSLP I	Coordinator, and Livestock Expert	Tel. 0921 555 427, 0911 016 641 Semera
24	Mr. Tamiru Likachwe	Afar	-	-	DRSLP I	Rangeland Management Expert	Tel. 0910356931 Semera
25	Mr. Amir Abdu	Afar	-	-	DRSLP I	Livelihood Expert	
26	Mr. Mohammed Ali	Afar	Zone 1	Elidar	Livestock, Agri & NR Office	NRM expert	Tel. 0921 233 742
27	Mr. Ibrahim Ali		Region	Elidar	Livestock, Agri & NR Bureau	Senior NRM expert	
28	Mr. Melaku Kassa	Afar	Awsu Risu	Elidar	Woreda Agricultural Development Office	Planning & Cooperative	Tel. 0911 935 668 Elidar
29	Mr. Amin Abdu	Afar	Awsu Risu	Elidar	Value Chain	Cooperative	Tel. 0913 530 147 Elidar
30	Mr. Habibe Mhamed	Afar	Awsu Risu	Elidar	DRSLP I	Project Coordinator	Tel. 0913 716 813 0937 558 826 Elidar
31	Mr. Endires Hussene	Afar	Awsu Risu	Elidar	Agricultural Development Office	Livestock expert	Tel. 091 294 161 Elidar
32	Mr. Jemale Ali	Afar	Awsu Risu	Elidar	Water Development Office	Water office expert	Tel. 0902 153 267 Elidar
33	Mr. Kalid Yemam	Afar	Awsu Risu	Elidar	Women and Youth Office	Monitoring and Evaluation Expert	Tel. 0935 596 720 Elidar
34	Mr. Melaku Kassa	Afar	Awsu Risu	Elidar	Agriculture Office	Cooperative Expert	Tel. 0911 935 668
35	Mr. Easea Hare	Afar	Awsu Risu	Gerene	District Administration Office	Administrator	Tel. 0961 594 928 Gerene
36	Mr. Ahemed Ysin	Afar	Awsu Risu	Gerene	Agricultural Development Office	Head of Office	Tel. 0912 083 426 Gerene
37	Mr. Yosuf Esmaeal	Afar	Awsu Risu	Gerene			Tel. 0911 804 150 Gerene
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40	Mr. Haya	Afar	Awsu Risu	Gerene	District Security Bureau	Head	Gerene
41	Mr. Hibil Hussen	Somali	-	-	DRSLP I	Regional Project Coordinator	Tel. 0915 406 846 Jigjiga
42	Mr. Mahamed Farah	Somali	-	-	Labor and Social Affair Bureau	Former DRSLP project Coordinator	Tel. 0915 060 569 Jigjiga
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45	Mr. Abdulkadir Omar	Somali	-	-	Bureau of EPA	Department Head	
46	Mr. Ebrahim Aden	Somali	-	-	Bureau of EPA	Expert	

47	Mr. Abduleqider Jama	Somali	-	-	Livestock Resource and Pastoral Development Bureau	Regional Pastoralist Development Expert	Tel. 0915 227 025 Jigjiga
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50	Mr. Ahamed Mohamed		Afder	Barey	Water Development Bureau	Head, Bureau	Tel. 0912 943 028 Barey
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52	Mr. Abdi Mohamed	Somali	Afder	Barey	Livestock office	Livestock	Tel. 0915 554 372 Barey
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54	Mr. Usman Aman	Somali	Liben	Dollo Ado	WoA	NRM expert	Tel. 0932 404 801
55	Mr. Abdi-Mohamed Ibrahim	Somali	Liben	Dollo Ado	Livestock, Agri & NR office	Senior Livestock Expert	Tel. 0939 899 871
56	Mr. Mohamed Kelif	Somali	Liben	Dolo Ado	District Administration Office	Chief Administrator	Barey
57	Mr. Sanbul Ahamed	Somali	Liben	Dolo Ado	District Agricultural Office	Agronomy expert	Tel. 0985 099 035 Dolo Ado
58	Mr. Abdrhman	Somali	Liben	Dolo Ado	District Agricultural Office	Livestock expert	Tel. 0915 554 872 Dolo Ado
59	Mr. Abdrhman Dhire	Somali	Liben	Dolo Ado	Water Development Office	Head, Office	Tel. 0929 393 130 Dolo Ado
60	Mrs. Saida Nasir	Somali	Liben	Dolo Ado	Cooperative Development Office	Head, Office	Tel. 0936 333 942
61	Mr. Nur Mohamed	Somali		Arareso	District Administration	Deputy Administration	Arareso
62	Mrs. Nemo Adem	Somali	Liben	Dolo Ado	Women and Youth Office	Office Head	
63	Mrs. Fertuna Dahir	Somali	Liben	Dolo Ado	Women and Youth Office	Expert	
64	Mr. Ousman Aman	Somali	Liben	Dolo Ado	Agricultural development Office	NRM expert	

Annex 6: Project and field visited Woreda Human and Livestock Resource

Woreda	Human Population			Livestock Resources in Number							Others
	Male	Female	Total	Cattle	Goats	Sheep	Donkey	Mule	Camel	Poultry	
Afar											
Awra	24,081	20,925	45,006	24,274	103,500	54,953	7,128		29,090	17,676	
Berhale	59,099	45,580	104,679	59,572	254,006	134,864	17,493		71,392	43,379	
Dalifage	29,146	20,909	50,055	61,450	156,167	5,030	25,606				
Dewe	28,693	24,443	53,136	54,280	93,100	22,100	41,200		21,100	200	
Dulesa	14,281	12,825	27,106	14,395	61,379	32,589	4,227		17,251	10,482	
Elidar	53,273	47,408	100,681	17,145	130,017	59,294	6,429	4,324	21,439		
Afdera	20,486	15,805	36,291	11,855	20,500			13,858	15,050		
Erebt	21,529	16,819	38,348	25,609	61,986			1,614	10,899		
Gelaelo	19,529	18,035	37,564	62,877	97,602			2,847	20,223		
Adear,	34,228	27,849	62,077	7,990	48,041			451	5,602		
Hadellela	20,595	16,721	37,316	64,560	201,121			5,677	16,797		
Somali											
Gashamo	100,112	108,455	208,568	22,332	203,662	204,616	3,426		144,619	13	
Dolo-Ado	107,379	108,592	215,971	280,900	369,630	316,378			116,465	9,234	
Hadagalo	50,758	29,140	79,898	20,488	147,852	96,658			28,719		
Barey	53,658	69,140	122,798	225,582	396,003	436,988	2,004		74,764		
Higloley	28,420	29,580	58,000								
Goljano				31,678	260,392	270,798	3,529		33,983		
Ararso				13,969	162,637	177,996	1,691		18,659		
Birgod				37,051	171,387	143,458	3,370		87,462		
Hadegeda				120,737	196,396	279,070	10,000		38,204	2,200	650 horse
Rasso				17,145	98,799		6,429		21,439		
Kebridehar				341,000	1,229,869		14,870		983,373		
Mubarek,				14,591	125,480		1,242	14,591	64,479		

Marsin				17,320	488,707		9,187		321,336		
Kubi				9,995	269,075				94,206		
Oromai											
Adola rede	42,885	42,204	85,089	88,568	39,210	1,117	2,957	1,043		89,567	
Aga weyu	39,341	41,367	80,708	72,456	74,013	16,538	27,556	98	4,921	57,596	
Wadera	57,103	46,718	103,821	423,054	482,913	7,539	26,473	3,151	2,289	455,021	
Dugda Dawa	75,383	79,047	154,432	454,745	248,931	113,600	37,792	185	1,928	37,150	84,144
Dillo	19,090	18,602	37,692	182,594	188,613	188,626	13,292		1,833	1,830	
Guchi	14,406	14,263	28,669	66,234	78,110	38,100	2,400	10	40,170	29,000	
Dubuluki	30,176	26,486	56,662	78,155	75,653	45,382	3,704		79	4,187	13,706
SNNP											
Bero	39,597	34,620	74,217	84,219	58,467	33,859	15,179	3,224	-	89,530	910
DASENECH	35,300	36,637	71,937	10,03,538	1,013,971	758,018	17,224	0	358	23,712	
gachit	63,639	67,582	131,221	2,532,547	975,679	1,620,452	3,000	3,179		1,004,974	20792 horse
goba	47,939	50,873	98,812	231,289	41,559	44,963	459	3,897	23,991	219,329	
goregesha	16,134	16,827	32,961	711,136	447,342	474,544	279		117	665,815	22 horse
HAMMER	49,016	39,167	88,183	445,998	2,036,926	1,074,446	27,682	0	218	71,900	10,156
M.sahsa	48,544	45,183	93,727	202,386	335,931	312,509	110		0	674,032	12 horse
maji	23,571	24,827	48,398	311,560	95,679	110,378	32	2,900	-	220,090	
NYANGATOM	13,237	13,296	26,533	500,586	154,385	126,940	24,171	0	0	6,226	2,024

ANNEXES7. Major development investment in Ethiopia's PAP areas, 1960–2018

PROJECT	FINANCIER	US\$, MILLIONS	SOURCE	Duration
SLDP IDA Project agreement	World Bank	5	IDA 1973 project agreement	1965-73
TLDP (PCR)	World Bank, AfDB, and GoE	36	World Bank 2001 PCR	1975–84
PCDP	World Bank, IFAD, GoE,	453	World Bank 2008 PCDP II PAD,	2003–19
SERP (PCR)	ADF, GoE	34	AfDB 2001, SERP PCR	1990–2001
RPLRP	World Bank	75	World Bank 2014 RPLRP PAD	2015–19
DRSLP I	AfDB	46	AfDB/ADF 2014	2013–19
DRSLP II	AfDB	50	IDDRSI 2015	
Pastoral Livelihood Initiatives	USAID	34	USAID 2009	2007-9
Pastoral Livelihood Initiatives	USAID IBTC	16	Stockton et al. 2012 PLI II MTR.	2009-2013
PRIME	USAID	70	USAID FtF 2019	2012–18
EU RESET Phase II (EU RESET	EU	58	EU RESET 2016	
SDRP	KfW	15	IDDRSI 2015	
SDRA	Italian Development	16	DRSLP 2015	
RAIN	USAID/OFDA	21	Kleiman 2013	
Total		928		

Source : (Gebremeskel et al., 2019)¹²

Annex 8: Data Collection Tools

Formulation and evaluation (technical, environmental and social) of the program to build resilience for food and nutrition security in the Horn of Africa (HoA) : Data collection checklist for Assessment of Environmental and Social Safeguards Capacity and Practices in the program countries

Objectives

- assess the institutional arrangements, existing regulations, and capacity for ensuring appropriate environmental and social management, and impact assessment in the planning and delivery of the proposed program interventions;
- review the performance of environmental and social safeguards in the program implementing institutions at all levels; and
- identify possible challenges and opportunities to achieve safeguards commitments under the proposed program ,

Approach

- Review the federal/central level safeguards oversight bodies relevant to your countries e.g. Ministries of agriculture, Environment, Forest ministries/agencies Labor and Social affairs ministries/agencies; finance ministries etc.
- The same should be repeated in relevant administrative structure lower than the above;
- The review should attempt to go “deeper” rather than “broader”,
- Visits to all administration levels and organizations will be conducted to collect information on :
 - The institutional and physical framework of the environment and climate change.
 - The policies, strategies, laws, regulations and international agreements subscribed and in force, in terms of the environment and climate change.
 - Existing Environmental and social policies and legal frameworks;
 - Institutional arrangements for environmental and social safeguards at different levels
 - Status of environmental and social impact assessment and implementation of mitigation measures;
 - Capacity Development interventions carried out on the environmental and social management system (ESMS)
 - Capacity gaps in environmental and social management and impact assessment;
 - Monitoring and supervision on the implementation of safeguards tools, if any, and
 - Coordination between oversight bodies (environment and social protection ministries/institutes/agencies) and basic sector institutions (agriculture, health, road, water, education etc.,) on environmental and social safeguards.
 -

Interview checklist

Central/Federal level

1. Institutional responsibilities and arrangements for environmental and social management with regards to the program implementation thematic areas/ in the central/federal ministries/agencies

No	Ministry/ agency	Institutional responsibilities and arrangements	Guidelines/ regulations and other arrangements related to the program	What can be done to further strengthen this? If required

			implementation thematic areas	

2. Capacity development for environmental and social management

2.1. What is the status of assigning an Environment and Social Management specialist in Ministry/ agency ? If assigned, when was this carried out?

2.2. What is the status of the availability of Environmental and Social Management Operational Manual ? If it is available, when was this carried out? Is it distributed to all lower administration levels ?

2.3. What are the major Capacity Development programs/plans for environmental and social management (carried out and planned) for the ministry/agency and region and sector offices?

3. Environment and Social Assessment practice

3.1. What is the Ministry's/agency's feeling about the implementation of Environmental and Social Management at regional and sectoral structures?

- Among the different administrative levels?
- Among Sectors?

3.2. What are the Challenges and issues requiring improvement with regard to Environmental and Social Impacts Management?

- Accessibility of service to the underserved?
- Gender sensitivity of services provided?
- Any other?

3.3. What should be done to improve the overall condition of Environmental and Social Impacts Management?

3.4.

Lower level administration structures as relevant in different countries (e.g. regions/states/counties/blocks/ woredas etc.)

The following information will be collected by bringing together all relevant program implementing administrative structures (next from the center/federal) and safeguards oversight bodies for discussion in one hall to respond to guiding question (s) relevant to them. Similarly in the lower level administrative structures, sectorial offices will come together in one hall for discussion based on guiding question (s) relevant to their offices.

1. Institutional responsibilities and arrangements

1.1. Offices and departments responsible for Environmental and Social Management of the program thematic areas including their institutional responsibilities and arrangements.

No	Administrative structure/level	Institutional responsibilities and arrangements	Guidelines/ regulations and other arrangements related to the program implementation thematic areas	What can be done to further strengthen this? If required

Note: * to be answered by the different administrative structures

1.2. What is the status of lower level administrative structure staff training on Environment and Social Management?

1.3. What guidelines and procedures are available for the implementation of Environmental and Social Management

2. Capacity development

2.1. What is the staffing profile involved in Environmental and Social Management system implementation in administrative office)?

No	Organization	Academic profile			Responsibilities
		Area of specialization	Academic status	Year of employment	

2.2. How satisfied is the administrative office regarding the staffing condition assigned for Environmental and Social Management system? Why? Why not?

3. Environment and Social Assessment practice

3.1. What kind of Environmental and Social Impact Assessment (s) were carried out during the last five years? (Type of assessment, date, the organization who carried out the assessment).

4. Coordination

4.1. Describe the kind of coordination existing between the basic sectors and safeguards oversight bodies,

- What is the satisfaction level of your organization in the current coordination in 1-5 scale, (1 being low 5 being outstanding)?
- Give reasons for the positive and negative) scores.

5. Commitment and recognition of good performance

5.1. How is the recognition and reward for better performing administrative structures for activities that demonstrate sound Environmental and Social Management carried out?

5.2. How is the Annual Performance Assessment of Environmental and Social Management undertaken?

5.3. Establishment of regular joint review mechanisms

5.3.1. What is the mechanism to jointly review lower level administrative structures Environmental and Social Management activities?

5.3.2. How sensitive is the review to vulnerable groups including women, elderly, disabled in each sector?

6. Community participation and grievance redressing mechanism

6.1. Describe community consultation processes especially related to project site selections, if there were any?

- What is the satisfaction level of your organization in community participation in 1-5 scale, (1 being low 5 being outstanding)?
 - Give reasons (positive and negative) for the score.
-
-

6.2. Describe Grievance Redress Mechanism (GRM) practices, if they exist.

- What is the satisfaction level of your organization in the GRM process in 1-5 scale, (1 being low 5 being outstanding)?
 - Give reasons (positive and negative) for the score.
 - How many cases of complaints are recorded? What are the major issues? and how long does it take to close a case? (Take one grievance case as an example and describe the process)
-
-

6.3. Describe the Social Accountability processes in relation to how vulnerable and underserved citizens tend to feel in expressing their individual views to service providers or through a GRM?

- How is GRM /SA organized at the administrative level ?
- What is the satisfaction level of your organization with regard to making most vulnerable and underserved citizens to feel comfortable in expressing their views in 1-5 scale?
- Give reason (positive and negative) for the score.

7. What are the Challenges and issues requiring improvement with regard to Environmental and Social Impacts Management?

- Accessibility of service to the underserved?
 - Gender sensitivity of services provided?
 - Any other?
-
-

8. What could be done to improve the condition of Environmental and Social Impacts Management practices?

SITE LEVEL OBSERVATION CHECKLIST

1. Observe and describe the visited sites including beneficiaries.
 - 1.1. Environmental Pollution ;
 - 1.2. Construction activities ;
 - 1.3. Displacement of people;
 - 1.4. Any identified cumulative effects.
 2. Personnel required to provide quality service at the specific level, with special focus on
 - 2.1. Qualification , Gender/culture sensitivity of service providers;
 3. Identify beneficiaries including vulnerable and underserved groups (women, children, disabled, elderly)
 4. Major environmental, social and climate change related issues and challenges?
-
-
-

Annex 9: List of Participants in the validation workshop

No	Name	Organization	Title	E-mail
1	Participants from Ministry of Agriculture			
1.1	Dr. Fikeru Regassa	MoA (Livestock resource sector)	State Minister	fikreregassa004@gmail.com
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Annex 10: Ethiopian ESIA Law, and directives

Ethiopian environment, forest and climate change commission proclamations

- [Hazardous Waste Management Proclamation 1090-2010.pdf](#)
- [Kyoto-protocol-amendment-ratification-Proclamation.pdf](#)
- [Proclamation/Proc-No.-192-2000-Basel-Convention-on-the-Control-of-the-Tr1.pdf](#)
- [Proc-No.-279-2002-the-Stockholm-Convention-on-Persistent-Or.pdf](#)
- [Proc-No.-355-2003-Bamako-Convention-Ratification.pdf](#)
- [Proc-No.-356-2003-Basel-Convention-Amendment-Ratification.pdf](#)
- [Proclamation/Proc-No.-362-2003-Cartagena-Protocol-on-Biosafety-Ratification.pdf](#)
- [Proc-No.-439-2005-Kyoto-Protocol-Ratification.pdf](#)
- [Proc 716-2011 Ozone proclamation.pdf](#)
- [Proclamation-No-896-2015-Biosafety-amendment.pdf](#)
- [Proc No. 299-2002 Environmental Impact Assessment.pdf](#)
- [Proc No. 300-2002 Environmental Pollution Control.pdf](#)
- [Proc No 513 Solid Waste Management Proclamation.pdf](#)
- [Industrial chemicals-Enrollment and Administration Approval-Proclamation](#)
- [The Forest Development Protection and Use Proclamation](#)

Multilateral Agreements/ Conventions/ Protocols

Atmosphere

- [Atmosphere - Kyoto Protocol.pdf](#)
- [Atmosphere - UNFCCC.pdf](#)
- [Atmosphere - Vienna Convention.pdf](#)
- [Montreal-Protocol.pdf](#)
- [Paris agreement.pdf](#)
- [UNCCD.pdf](#)

Biodiversity

- [cartagena-protocol.pdf](#)
- [Cartagena protocol on biosafety to the convention on biological diversity - text and annexes.pdf](#)
- [CBD.pdf](#)
- [Nagoya - Kuala Lumpur Supplementary Protocol of Liability and Redress EN.pdf](#)

Chemicals

- [Bamako.pdf](#)
- [Basel Convention.pdf](#)
- [baselprotocol.pdf](#)
- [/Minamata Convention on Mercury booklet English.pdf](#)
- [POPs Convention.pdf](#)
- [Rotterdam Convention.pdf](#)
- [Stockholm Convention on Persistent Organic Pollutants.pdf](#)

Minamata convention

- [Minamata-Convention-booklet-eng-full.pdf](#)

Paris agreement

- [English paris agreement.pdf](#)
- [paris.1cp-21 \(1\).pdf](#)
- [Pocket Guide-Digital Paris Agreement.pdf](#)
- [Proposed activities after the Paris agreement-1.pdf](#)

Wildlife

- [AEWA.pdf](#)

- [CITES.pdf](#)
- [CITES app.pdf](#)
- [CMS.pdf](#)
- [CMS ACAP.pdf](#)
- [Lusaka94.pdf](#)

Regulations

[Electronic and Electrical Waste Management and Disposal Proclamation.pdf](#)

[Industrial Pollution Regulation.pdf](#)

[Lead in Paint Regulation 4252018.pdf](#)

[Regulation 411-2017 National Bio-safety Advisory Committee Establishment \(1\).pdf](#)

Directives

[Application Directives0001.pdf](#)

[Directive Issued to Determine0001.pdf](#)

[Directive Issued to Determine the Requirments0001.pdf](#)

[Directive Issued to provide Risk assessment0001.pdf](#)

[DIRECTIVE to approve standards](#)

[Directive to establish procedures for Mg of Risk0001](#)

Manuals

[Manuals/CRGE Facility Operation Manual all sections](#)

Polices

Environment

[Environment Policy of Ethiopia](#)

Forest

[Forest Policy Strategy english 2007](#)

Water Resource

[Ethiopian Water Resources Management Policy](#)

Annex 11: [Stockholder consultation](#)



Photos, Stockholder consultation at office and field level in Afar and Somali Region at woreda and Kebele levels.

Annex 12: Country team experts working on the feasibility study ESIA/ESMP

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