



**The Federal Democratic Republic of Ethiopia
Ministry of Environment, Forest and Climate Change**

**Environmental and Social Management Framework
(ESMF)**



Final Report

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Acronyms

A/R	Afforestation / Reforestation
AAU	Addis Ababa University
ADLI	Agriculture Development-Led Industrialization
AEZ	Agro-ecological Zone
Fad	African Development Bank
AGP	Agricultural Growth Program
BEF	Bureau of Environment
BERSM	Bale Eco-region Sustainable Management Project
BioCF	BioCarbon Fund
BoARDs	Bureaus of Agriculture and Rural Development
C&P	Consultation and Participation
CBD	Convention of Biological Diversity
CBFM	Community Based Forest Management
CBOs	Community Based Organizations
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CFC	Collaborative Forest Committee
CIF	Climate Investment Funds
CIFOR	Center for International Forestry Research (Indonesia)
COP	Conference of the Parties to the UNFCCC (the parent treaty to the Kyoto Protocol)
CREMA	Community Resource Management Area
CRGE	Climate Resilient Green Economy
CSA	Central Statistical Agency
CV	Curriculum Vitae
D&D	Deforestation and Forest Degradation
DAs	Development Agents
DFID	Department for International Development (UK)
EACC	Ethiopian Ethics and Anti-Corruption Commission
EBI	Ethiopian Biodiversity Institute
EDRI	Ethiopian Development Research Institute
EF	Emission Factors
EFAP	Ethiopian Forestry Action Program

EHRC	Ethiopian Human Rights Commission
EIA	Environmental Impact Assessment
EIA	Ethiopian Investment Agency
EIO	Ethiopian Institutes of Ombudsman
EMP	Environmental Management Plan
EPA	Environmental Protection Agency
EESA	Ethiopia Electric Service Agency
ESIA	Environmental and Social Impact Assessment
ESIF	Ethiopian Strategic Investment Framework
ESMF	Environmental and Social Management Framework
ESO	Enhancement Strategic Options
EU	European Union
EWCA	Ethiopian Wildlife Conservation Authority
FACC	Federal Anti-Corruption Commission
FAO	Food and Agriculture Organization
FASC	Federation of African Societies of Chemistry
FASDEP	Food and Agricultural Sector Development Policy
FCPF	Forest Carbon Partnership Facility
FDMP	Forest Development Master Plan
FDRE	Federal Democratic Republic of Ethiopia
FCPA	Federal Cooperatives Promotion Agency
FDPPC	Federal Disaster Prevention and Preparedness Commission
FGD	Focus Group Discussion
FPC	Federal Police Commission
FPIC	Free, Prior and Informed Consultation
FREL	Forest Reference Emission Level
FRL	Forest Reference Level
FWE	Forest and Wildlife Enterprise
GDP	Gross Domestic Product
GECS	Green Environment Consultancy Service
GEF	Global Environmental Fund
GHG	Green House Gas
GIS	Global Information System
GIZ	German Development Corporation

GoE	Government of Ethiopia
GRM	Grievance Redress Mechanism
GTP	Growth and Transformation Plan (of Ethiopia)
GTP2	Growth and Transformation Plan 2 (of Ethiopia)
Ha	Hectare
HAPI	Horn of Africa Press Institute
HFPAs	High Forest Priority Areas
HoAREC&N	Horn of Africa Regional Environment Centre
HPR	House of People's Representatives
IBC	Institute of Biodiversity Conservation Ethiopia (now EBI)
ICCO	Inter-Church Cooperation Organization
IFC	International Finance Corporation
IFR	Institute of Forestry Research
IGES	Institute for Global Environmental Studies
IPCC	Intergovernmental Panel on Climate Change
IPO	Implementing Partner Organizations
IPM	Integrated Pest Management
IT	Information Technology
IUCN	International Union for Conservation of Nature
JIIIE	Joint Implementation and International Emissions Trading (JIIIE)
KAs	Kebele Administrations
LULC	Land Use Land Cover
M & E	Monitoring and Evaluation
MEFCC	Ministry of Environment, Forest and Climate Change
MER	Monitoring, Evaluation and Reporting
MoANR	Ministry of Agriculture and Natural Resources
MoCT	Ministry of Culture and Tourism
MoFEC	Ministry of Finance and Economic Cooperation
MoH	Ministry of Health
MoT	Ministry of Trade
MoUDH	Ministry of Urban Development and Housing
MoWIE	Ministry of Water, Irrigation and Electricity
MRV	Monitoring Reporting and Verification
MW	Mega watts

NAMA	Nationally Appropriate Mitigation Action
NFF	National Forest Forum
NFPA	National Forest Priority Areas
NGOs	Non-Governmental Organizations
NPV	Net Present Value
NRSC	National REDD Steering Committee
NTFP	Non-Timber Forest Product
OAG	Office of the Attorney General
OFLP	Oromia Forested Landscape Program
OFWE	Oromia Forest and Wildlife Enterprise
ORCU	Oromia REDD+ Coordination Unit
ORS	Oromia Regional State
PACs	Project Affected Community (ties)
PAD	Project Appraisal Document
PAGWW	Pan African Agency for the Great Green Wall
PAPs	Project Affected Peoples
PASDEP	Plan for Accelerated and Sustainable Development to End Poverty
PDD	Project Design Document
PFM	Participatory Forest Management
PIM	Project Implementation Manual
PLC	Private Limited Company
PPE	Personal Protective Equipment
Proc.	Proclamation
RARIs	Regional Agricultural Research Institutes
RBE	Regional Bureau of Environment
REDD+	Reducing Emissions from Deforestation and Forest Degradation
REL	Reference Emission Level
RL	Reference Level
RLMRV	Reference Level Measurement Reporting and Verification
RPC	Regional Police Commission
R-PIN	REDD+ Project Idea Note
R-PP	Readiness Preparation Proposal
RRCU	Regional REDD+ Coordination Unit
RRSC	REDD Steering Committees

RRTWG	Regional REDD Technical Working Groups
RTWG	National REDD Technical Working Group
SEA	Strategic Environmental Assessment
SEMEA	Small and Micro-Enterprises Agency
SESA	Strategic Environmental and Social Assessment
SFM	Sustainable Forest Management
SLMP	Sustainable Land Management Project
SNNPRS	Southern Nations, Nationalities and Peoples Regional State
SO	Strategic Option
tCO ₂	Ton of Carbon dioxide
TF	Task Forces
ToR	Terms of Reference
TWG	Technical Working Group
UK	United Kingdom
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
USD	United States Dollar
VCS	Voluntary Carbon Standards
VPA	Voluntary Partnership Agreement
WaBuB	Waldaa Bulchiinsa Bosonaa (in Oromoo Language-which means Forest Administrators Association)
WAJIB	Waldaa Jiraatota Bosonaa (in Oromoo Language-which means Forest Dwellers Association)
WB	World Bank
WBISPP	Woody Biomass Inventory and Strategic Planning Project
WRI	World Resources Institute
WSSA	Water Supply and Sewerage Authority
WWF	World Wildlife Fund

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Executive Summary

Ethiopia is a participant country in the Forest Carbon Partnership Facility (FCPF). Accordingly, it is implementing its Readiness Preparation Proposal (R-PP) through National REDD+¹ Readiness Program funded by a grant from the World Bank (USD 3.6 million) and a financial support (USD 10 million) by Norway and UK through the World Bank's BioCarbon Fund. The preparation of the Environmental and Social Management Framework (ESMF) is one of the requirements for Ethiopia to submit the REDD+ Readiness Package scheduled for March 2017 or so to be eligible for potential future carbon finance as it becomes available.

Ethiopia also considers REDD+ as an opportunity and viable source of sustainable finance for investment in forest management and restoration and enjoy the multiple benefits (biodiversity conservation, watershed management, increased resilience to climate change, improved livelihoods and reduced poverty) from the forestry sector.

The forest development, conservation and utilization policy and strategy encourages individuals, communities and organizations to play key roles in developing forest and get benefit for themselves and the country, as they contribute to the climate change amelioration. The policy provides a broad base area for the implementation of REDD+ and its associated safeguard tools.

Different documents such as the REDD+ Readiness Preparation Proposal, Climate Resilient Green Economy strategy, Bale-Eco-region REDD+ Program, Oromia Forested Landscape Program, National Deforestation and Forest Degradation Study Report and the draft National REDD+ Strategy Options proposed some overlapping as well as different strategic options to address the causes of deforestation and forest degradation in Ethiopia. In the Strategic Environmental and Social Assessment (SESA) document, the consulting firms sorted out the similarities and differences of the proposed strategic options and worked on the final ones those identified by the Drivers of Deforestation and Forest Degradation (D&D) analytical study. This Environmental and Social Management Framework (ESMF) was prepared for the final sorted out REDD+ strategic options in the national REDD+ SESA document.

The draft National REDD+ Strategy proposed range of strategic options (as identified by the D&D study) grouped in three main categories: (i) targeted measures (focusing on three sectors; namely, forest, agriculture and energy); (ii) policy and institutional measures; and (iii) crosscutting issues. Under the targeted measures, the identified strategic actions include ensure sustainable forest management (in high forest and woodlands), enhance forest carbon stock, agricultural intensification, reduce demand for fuel wood and charcoal, improve livestock management, and promote supplementary income generation. In the second strategic option, the identified strategic actions include enhancement of cross-sectoral synergies and stakeholder participation; forest governance and law enforcement; forest tenure and property right; and land use planning and inter-sectoral coordination on planning and joint implementation. For the last strategic option, the identified strategic actions include capacity building; ensure full participation and equitable benefit flow to women; demand-driven research and research and extension linkage; and benefit sharing. This Environmental and Social Management Framework would be used mainly to address

¹ REDD+ stands for countries' efforts to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks (www.forestcarbonpartnership.org).

environmental and social impacts arising from the implementation of the identified strategic actions under the National REDD+ strategy as per the environmental and social safeguards requirements of the Government of Ethiopia (GoE) and the World Bank as well as other relevant safeguard policies.

The main purpose of this ESMF is to establish clear procedures, methodologies and institutional arrangements for the environmental and social assessment, review, approval and implementation of interventions while implementing the strategic actions identified under the national REDD+ Strategy. It also states appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns, including grievances, related to REDD+ interventions; and determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF.

The ESMF has been formulated by collecting primary and secondary data as well as compiling information through extensive review of pertinent literature, published and unpublished reports and strategic documents, policies, proclamations; and from interviews, discussions and observations in the selected study regions, woredas and kebeles. It has also used the main findings of consultative discussions held with line ministries, all regional State stakeholders found at different administrative levels, the National REDD+ Secretariat, development partners, NGOs, and Academia, among others. In addition, community consultation at woreda and kebele level has been carried out in all selected study sites. In 52 Kebeles, a total of 936 consultations were carried out with women, men, youth, forest dependent and underserved community members. The criteria for selection of the woredas include hot spots of deforestation and forest degradation (identified in the national and Oromia region drivers of deforestation and forest degradation study), REDD+ implementation potential, leakage, forest types (diversity), plantation site, and social and cultural diversity of the forest communities with respect to their forest management and utilization practices.

As the National REDD+ Program is a Category B project, it should be noted that any REDD+ interventions/project activities that would be categorized as category 'A' will not be funded and implemented under the REDD+ Program. As the implementation of the REDD+ interventions/projects will take place at all different administrative levels (from national to local), the Ministry of Environment, Forest and Climate Change (MEFCC), along with the regional environmental authorities, is primarily responsible for spearheading, coordinating and overseeing the implementation the ESMF. The Regional Environmental Authorities will oversee the implementation of all actions to mitigate adverse environmental and social impacts and enhance beneficial impacts in their respective regions, and also supervise their woreda offices to ensure sound management practices at the kebele/community level. Therefore, all involved institutions in the implementation of the REDD+ projects assume different roles and responsibilities, as per their institutional mandates. The REDD+ Secretariat will maintain contact with the sectoral institutions to update them with information and documentation as needed to meet the objectives of the ESMF.

The potential social and environmental risks for the identified REDD+ strategic options, are well stated in the report. For the identified risks, feasible environmental and social mitigation measures are presented as well. To ensure the implementation of these mitigation measures and the

implementation of the ESMF, monitoring and evaluation will be carried out. To this effect, monitoring plans are presented in the report.

Generally, there is limited capacity and expertise within the government structures (at different administrative levels) to deal with social and environmental risks and to properly implement safeguard instruments. Therefore, capacity building of the REDD+ implementers is crucial to effectively and efficiently implement the REDD+ ESMF and ensure the sustainability of REDD+ interventions/ projects. In this regard, an outline of the capacity need is presented for sectoral and cross-sectoral offices at different levels. Detailed budget requirement for the implementation of the ESMF is estimated for the upcoming four years. The budget requirement is calculated for new staff requirement (federal and regional levels), capacity building (training and material procurement), mitigation measures implementation, safeguard information disclosure, monitoring, evaluation, reporting and documentation. In addition, monitoring of the ESMF implementation and support on technical issues would be provided by the national REDD+ Secretariat and the national REDD+ safeguards task force. Accordingly, the implementation of the ESMF would require an estimated budget of 1.85 million USD for the upcoming four years.

In conclusion, the report encompasses all the technical, administrative, policy and legal frameworks required for addressing environmental and social safeguards issues during the preparation and implementation of REDD+ projects. Baseline information on the country's social and environmental resources is given in the second chapter of the report. Subsequent chapters give explanation on REDD+ program of Ethiopia, points out administrative, policy and legal requirements that are relevant to ESMF, sets management frameworks for REDD+ Implementation in the country, and outlines the technical and financial requirements for the implementation of ESMF and so on. Chapter eleven gives provision on how monitoring, evaluation and reporting should be carried out in parallel to the implementation of REDD+ projects. The last chapter gives an arbitration mechanism if disputes arise in the process of benefit sharing and putting other activity plans on the ground.

1. Introduction

National level programs and projects that target to develop the social and natural environments of the country should always take into consideration these social and environmental wealth of the country in their planning and implementation strategies. The reduction of emission from deforestation and forest degradation (REDD+) program is one of a kind that the country endeavors to implement at a national level with many facets. In the draft REDD+ strategy of the country it is indicated that REDD+ addresses issue related to agriculture, energy and forest. It also takes into account Ethiopia's aspirations to realize rapid and sustainable social environmental and economic growth. With an estimated emissions reduction or carbon removals of 130 million tCO₂e annually, 50% of GHG emissions between 2010 and 2030 will happen as a result of implementing REDD+ process. To achieve such level of reduction in emission projects are being developed and implemented from national down to community levels. Considering the extent of implementation of these projects at a large scale and also at a grass root level maintaining the safety of the local communities and their environment is a crucial issue that should meet international standards and procedures.

The Ethiopian REDD+ program has been developing various instruments and collecting baseline information to ensure research based social and environmental safeguards are in place parallel to implementing the various projects at all levels. Environmental and Social Management Framework (ESMF) is one of the tools that guidelines the implementation process of the REDD+ activities are done within international standards and keeping the safety of the social and environmental aspects of local communities. The ESMF provides an overview of relevant World Bank policies (including OP/BP. 4.10 to address concerns of underserved communities in Ethiopia's context) and describes the planning process concerning environmental and social issues, including for screening, preparation, implementation, and monitoring of projects and sub-projects.

This report therefore encompasses all the technical, administrative, policy and legal frameworks in which the implementation of REDD+ projects ensures the safeguard of the social and environmental issues. Baseline information on the country's social and environmental resources is given in the second chapter of the report. Subsequent chapters give explanation on REDD+ program of Ethiopia, points out administrative, policy and legal requirements that are relevant to ESMF, sets management frameworks for REDD+ Implementation in the country, outlines the technical and financial requirements for the implementation of ESMF and so on. The report, in chapter eleven, also gives provision on how monitoring, evaluation and reporting should be carried out in parallel to the implementation of REDD+ projects. The last chapter gives an arbitration mechanism in case disputes have arises in the process of benefit sharing and putting other activity plans on the ground.

2. Ethiopia Baseline Situation

Ethiopia is located in the northeastern part of Sub-Saharan Africa between latitudes 3° and 15° north on a total surface area of 1.1million square kilometers. Ethiopia is ecologically diverse country, with altitudes ranging from 116 meters below sea level in the Dallol depression to 4,620 meters above sea level at Ras-Dashen. The geologic and tectonic situation of Ethiopia is strongly linked to the development of the East African Rift System and of the Ethiopian magma dome. The physical conditions and variations in altitudes have resulted in a great diversity of climate, soil and vegetation. The major drainage basin of Ethiopia includes Baro-Akobo, Tekeze, Mereb, Denakil, Blue Nile, Ghibe-Omo, Genale-Dawa, Rift Valley Lakes, Awash and Shebele-Ogaden (Sileshi Bekele, 2001).

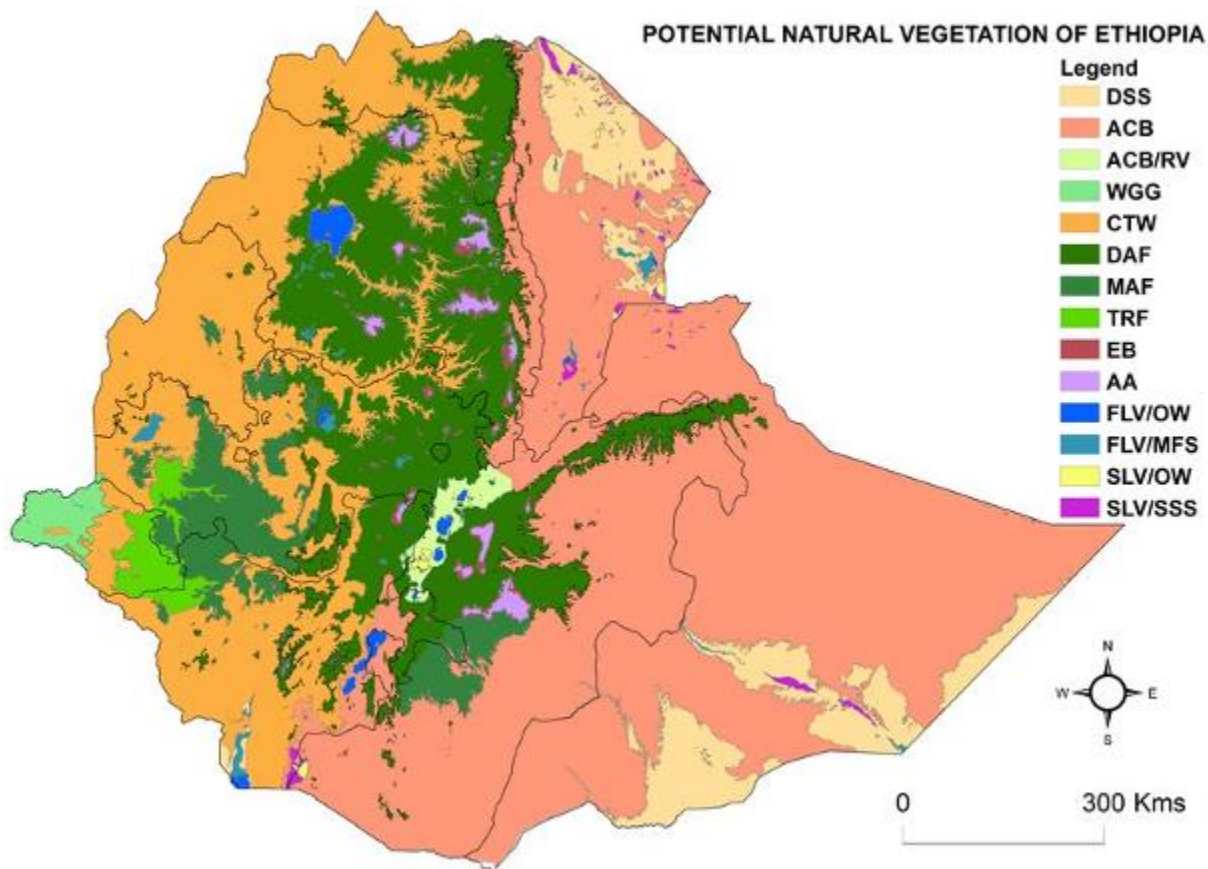
The climate pattern of Ethiopia is mainly determined by the alternations of the inner tropical convergence zone (ITCZ) and the influence of the Indian Monsoon throughout the year (Moron, 1998). Precipitation across the country is characterized by high spatial and temporal variability. On a spatial scale, the distribution of annual rainfall ranges from less than 400 mm in the Somali Region and the Afar Triangle to more than 2,400 mm in the southwest of Ethiopia. Awash River is the only river that is extensively used for commercial plantations of industrial and horticultural crops in the Rift Valley. From the total irrigated agriculture of about 161,125 hectares, over 43 % are found in the Awash River basin. The remaining potential for irrigated agriculture using Awash River is estimated at 136 220 hectares (Aberra Mekonen and Deksios Tarekegne, 2001).

Ethiopia is considered as a powerhouse of Africa due to its high hydropower potential but only a small part of the potential is developed so far. The country has started exporting power to Sudan and Djibouti and planned to export to Kenya, Yemen and Egypt. The Road Sector Development Program (RSDP) which was launched in 1997 is now in its Phase IV of implementation stage since 2010. The total road network of the country has reached 85,966km.

Ethiopia has 18 soil types but the major ones from the agricultural perspectives are Nitosols, Cambisols, Vertisols and Fluvisols. The soils that are important as arable land have a total area of about 40 million hectares (LUPRD 1984). Agricultural activities are the dominant sources of livelihood in the highlands of the country the lowland parts of the country are dominantly inhabited by pastoralists who depend on the extensive grass lands to pasture their livestock and on non-timber forest products such as gum and resin to supplement their household economy. Ethiopia has 96.6 million people in 2014 and is the second populous country in Africa with population growth rate undulating between 2.9 and 2.6 per cent annual. Majority of the population, 83 %, (CSA, 2014) are living in rural with more than 80% of the total populations of the country total population living only in three regional states (Oromia, Amhara and SNNP). Ethiopia has 86 ethnic groups who have their own distinct languages and socio-cultural structures with the SNNP regions hosting more than half of them.

Yitebitu Moges et al (2010) reported the forest cover of Ethiopia is estimated at 15 per cent which is similar to the recent unpublished report of EMA (2015). Friis *et al* (2011) identified and mapped 12 major vegetation types in Ethiopia (figure 1) that includes the Afroalpine belt, the Ericaceous belt, the Dry Evergreen Afromontane Forest and grassland complex, the Moist Afromontane Forest, Transitional Rain Forest, *Combretum-Terminalia* woodland and wooded grassland, *Acacia-Commiphora* woodland and bushland, Wooded grassland of the western Gambela region, the

Riverine vegetation, Freshwater lakes, lake shores, marsh and flood plain vegetation, Desert and semi-desert scrubland and the Salt –water lakes, lake shores, salt marshes and pan vegetation.



Code	Land Cover Designation
DSS	Desert and semi-desert scrubland
ACB	<i>Acacia-Commiphora</i> woodland and bushland proper
ACB/RV	<i>Acacia</i> wooded grassland of the Rift Valley
WGG	Wooded grasslands of the western Gambella region
CTW	<i>Combretum-Terminalia</i> woodland and wooded grassland
DAF	Dry evergreen Afromontane forest and grassland complex
MAF	Moist evergreen Afromontane forest
TRF	Transitional rain forest
EB	Ericaceous belt
AA	Afroalpine belt
FLV/OW	Freshwater lakes-open water vegetation
FLV/MFS	Freshwater marshes and swamps floodplains and lake shore vegetation
SLV/OW	Salt lake-open water vegetation.
SLV/SSS	Salt pans saline/brackish and intermittent wetlands and salt-lake shore vegetation

Figure 1: Potential Vegetation Map of Ethiopia

(Source: Friis et al. 2011)

3. REDD+ Program Description in Ethiopia

3.1 Background to Ethiopia's involvement in REDD+ initiative

Ethiopia has long recognized the country's vulnerability to climate change impacts and the urgency for a national adaptive response to climate change effects. As a responsible member of the global community, Ethiopia is an active participant in international climate negotiations and initiated and implementing a number of climate-related national policies. It has ratified the UNFCCC (1994) and UNCCD (1997), and submitted its initial national communications to the UNFCCC (in 2001) and its related instrument, the Kyoto Protocol (in 2005).

REDD+ has evolved in Ethiopia under a policy framework that encourages land rehabilitation through reforestation/afforestation. This is reflected through the setting of national targets to increase forest cover, as in the PASDEP (FDRE 2006), and in the provision of tax incentives for farmers who plant trees on their land, as stipulated in the 2007 Forest Management, Development and Utilization Policy. The NAMA (2010) further outlines strategies for multi-sectoral projects that aim to reduce GHG emissions, mainly through the use of renewable energy resources. Under the NAMA, forestry projects aim at reducing deforestation and forest degradation and increasing carbon sequestration through reforestation of degraded areas and sustainable management of existing forests.

In recent years, REDD+ policy seems to have been embedded within the wider CRGE strategy, which works together with the GTP. The GTP reflects the government's ambition to lift the country to middle income status by 2025 (FDRE 2011a). The CRGE strategy compliments the GTP in that it provides an ambitious cross-sectoral plan for achieving the transition, aiming to nearly triple GDP per capita by 2025 without increasing current levels of GHG emissions. Importantly, REDD+ is one of the four major initiatives of the CRGE strategy selected for fast-track implementation (FDRE 2011a).

Ethiopia considers REDD+, as an opportunity and viable source of sustainable finance for investment in forest management, forest conservation, and forest restoration to enhance multiple benefits of forests, including but not limited to biodiversity conservation, watershed management, increased resilience to climate change, improved livelihoods and reduced poverty (Annual Country Report, 2014).

Draft R-PP was submitted to the Forest Carbon Partnership Facility (FCPF) in October 2010 and after comments received, a reviewed version of the R-PP was re-submitted in May 2011 and received approval. In October 2012, the FCPF approved a readiness preparation grant of 3.6 million USD. According to Ethiopia's R-PP, implementation of the REDD+ Readiness process requires a total budget of USD 13.6 million. The balance of the funding required for implementation (USD 10 million) of the R-PP was provided by the Norwegian government and UK's DFID. The REDD+ Readiness Process was officially launched in January 2013. The REDD+ Secretariat at the Ministry of Environment, Forest and Climate Change is the prime unit for the coordination and implementation of the National REDD+ Readiness process.

3.2 The problem of Deforestation and Forest Degradation in Ethiopia

There is no expert consensus on Ethiopia's historical forest cover despite the frequently cited assertion that the country had close to 40% forest cover only a century or so ago. This figure has been derived from the work of the forester, Brietenbach (1962) who considered the effect of climatic factors to determine the extent that the climax forest vegetation cover must have had (FAO, 1981). Historical sources, for example Alvares who visited the country in the beginning of the sixteenth century, describes the Ethiopian highlands as extensively cultivated with many trees, but few closed forests (Prester John, 1961). It is, therefore, not possible that Ethiopia has ever had a closed forest cover within historical times as extensive as that described by FAO. The history of changes in vegetation, reconstructed from various written sources, has been summarized by Tewolde Berhan G. Egziabher (1990) for the period since 1500 A.D. His conclusion is that Ethiopia's forests were of limited extent, and that they were at their most extensive, in the 19th century.

Historically, deforestation in Ethiopia, particularly in the long-inhabited highland areas, has been a severe and persistent process (Zewdu Eshetu and Hoggbeg 2000; Demel Teketay 2001; Darbyshire *et al.* 2003). Agricultural expansion since the third and fourth millennium BC resulted in extensive deforestation and forest degradation in the northern highlands of Tigray and Wello (Phillipson, 1990). A study on the environmental history of Tigray, based on the analysis of geomorphological and other evidences, revealed that the highland plateau was extensively covered by dense vegetation before the advent and expansion of agriculture in the middle Holocene (Bard *et al.*, 2000). Similarly, using evidences from charcoal and pollen analysis of sediments, Darbyshire *et al.* (2003) reported that forests in the highlands of Wello have been steadily cleared for agriculture during the last 3000 years. Melaku Bekele (1992), after extensive review of the historical accounts, concluded that much of the forests in the central and northern highlands had already been converted for cultivation before the sixteenth century. These empirical pieces of evidence support the records that are found in many of the accounts of the early travelers. By inferring from traditional sources and by studying the wide-spread remnant indicator species in cultivated fields in the central highlands, Logan (1946) described the rapid and progressive forest clearing in the past hundred years.

Deforestation and forest degradation in the southwestern highlands, where there is one of the last remaining largest patches of high forests in the country, dates back to the last Century. Some historical accounts indicate that a large part of the high forest is secondary growth from abandoned cultivated fields (Athil, 1920; Melaku Bekele, 1992). From floristic evidence, Russ (1945) stated that large areas of the forests were cleared and cultivated but reverted to forest again in the past one or two hundred years. This was attributed to the massive depopulation of the region due to war and other causes in the middle of the nineteenth and early twentieth centuries (Montaden, 1912; Russ 1945; Melaku Bekele, 1992). As a result, the region remained sparsely populated and deforestation conversion was until the early 1940s. The main reasons were the absence of access roads, perennial crop-based farming, low trade exchange (Russ, 1945) and forests being used as shelter for coffee stands (Breitenbach, 1961). The opening of inroads and the start of forest logging (introduction of sawmills) during the Italian invasion caused rampant deforestation for agriculture and increased sporadic in-migration of people to the region. During the inventory of the southwest forests, Chaffey (1978) described extensive clearing of forests for cultivation. For example, 50% of the southwest

forest was cleared for cultivation in less than 20 years (Reusing, 1998). Deforestation in the region continued on a larger scale after the resettlement of people from the degraded and drought-affected regions of the country. The re-settlers, having the culture and experience of extensive cereal crop-based farming not only cleared large tracts of forests, but also introduced their farming system into the region (Mekuria Argaw, 2005).

However, the prevailing narrative of once densely forested highlands that have become denuded of their forest cover through a linear and continuous deforestation process was questioned by McCann (1997). The suitability and potential productivity of the highlands have made them attractive for settlement for a long period of time (Place et al. 2006). This long-term occupation and exposure of these areas to ox-plow agriculture (McCann 1997) are the most widely given explanations of the heavy deforestation.

The absence of regular forest assessments at national level has limited the availability of up-to-date information on the dynamics and extent of forest cover change. The most current and relatively thorough assessments of deforestation and degradation are therefore limited to specific forest areas connected to development projects on forest management and conservation, or those forests considered for academic or other studies. There is a general consensus among experts in that the problem of deforestation and forest degradation in Ethiopia has its roots in unsustainable land use (particularly agricultural expansion), unsustainable wood consumption, lack of appropriate institutional, legal and regulatory frameworks, economic and demographic factors. Of particular interest, in this regard, is the institutional instability of the forest sector which is believed to contribute to the irrecoverable loss of the most precious forest reserves of the country loss of institutional memory and discontinuity of planned activities to total neglect of the sectors valuable socio-economic contributions (Forum for Environment, 2009).

3.3 Review of the Drivers of Deforestation and forest degradation in Ethiopia

The understanding and appropriate analysis of the nature and diversity of the drivers of deforestation and forest degradation (D-DD) across scales is critical for designing strategic interventions and to change the business-as-usual scenario in GHG emissions from the sector. The drivers can take different forms as natural and anthropogenic, as direct and indirect, as social and economic, as policy and institutional, as local and national and/or global. However, for analytical simplicity and practical interpretation, the D-DDs are often categorized into two main parts: Direct or Proximate Drivers and Indirect or Underlying Drivers as defined below. These definitions hold as a working definition in this assessment study. However, first making the distinction between deforestation and forest degradation is essential. Accordingly, **deforestation** is understood as an anthropogenic act of changing or converting a forestland (planted or natural) to a different land use other than forest. Forest **Degradation** is the reduction or destruction of the forest structure, diversity and composition resulting in the deterioration of the productive capacity, function and limitation of the goods and services from the forest.

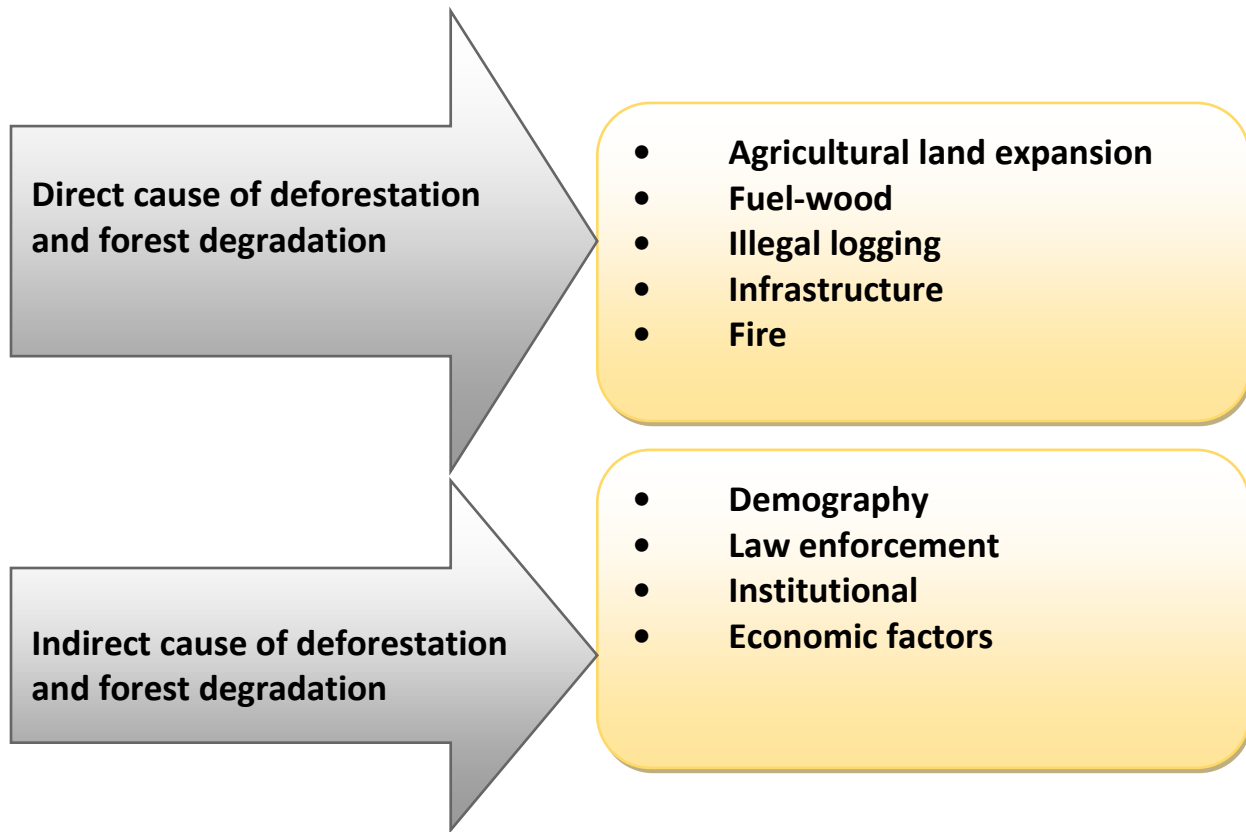


Figure 2: Direct and Indirect Causes of Deforestation in Ethiopia

3.3.1 Direct Drivers

The Direct or proximate D-DDs are human activities/actions and 'acts of nature' that directly impact the physical cover of the forest and/or the productive capacity of the forest, both resulting in the loss of the existing carbon stocks and reducing the potential capacity of the forest to absorb/sequester atmospheric carbon. The examples of the direct human activities that mainly drive deforestation are agriculture (small and large scale), mining, roads and infrastructure, urban expansion and settlements. Whereas wood extraction for fuel and construction purposes, charcoal production, deliberate or accidental fires ignited by humans, livestock grazing, logging for timber extraction, coffee plantations in forest lands are some of the examples of direct drivers of forest degradation. The natural direct drives or the 'acts of nature' that cause forest degradation include natural fires, climate extremes, pests and diseases and volcanoes.

Small-scale agricultural conversion: the natural growth of population in the forest areas coupled with the continued spontaneous in-migration into those areas increased the rate of deforestation for subsistence agriculture. The rate of conversion has been reported as being rapid and rampant. The in-migration is partly driven by the state sponsored resettlement programs in the earlier regimes. The resettlements often took place in and around the forest margins without any proper regulation and land use guidelines.

Large-scale agricultural conversion (investment): land for large-scale agricultural investment (such as coffee and tea plantations, irrigated farming, etc.) might sometimes include natural forestlands and woodlands resulting in extensive conversions of forestland into non-forest land. Despite the economic significance, such investments aggravate deforestation.

Increased wood extraction for fuel and construction purposes: as stated in the energy policy of Ethiopia (Energy Policy of Ethiopia, 2006), the largest share of energy source is biomass, covering 94 %. This includes fuel wood, charcoal, branches, leaves and twigs. In addition, the demand for construction wood has been increasing and extraction from the natural forests has increased. This is partly due to the erosion of customary forest management practices and replacement of user rights with state defined formal laws/use rights, which are not properly implemented.

Livestock grazing: an increasing livestock population and overgrazing in the pastoral and agro-pastoral areas is main driver of forest degradation (especially degradation of the woodland forest vegetation). Use of fire in the management of such grazing lands (to control bushes and reinvigorate growth of forage grasses) is also an important driver of forest degradation.

3.3.2 Underlying/Indirect Drivers

The Underlying or Indirect D-DDs are the complex interactions of the social, economic, political, cultural and technological processes that affect the direct or proximate drivers to cause deforestation and/or forest degradation. The underlying drivers operate at various scales ranging from the international, national and local circumstances. At the international level, market forces, particularly commodity markets and prices of goods play significant roles in driving or changing national policies and local circumstances resulting in deforestation and forest degradation. At the national level, population growth, policies and their implementation, cross-sectoral coordination, forest governance and institutions, regulations and law enforcement, in-migration, etc. are important indirect drivers. At the local level, poverty and subsistent livelihoods, limited options for income, lack of access to markets and limited social services are indirect drivers of deforestation and forest degradation.

In Ethiopia, relevant studies on D-DD and key development strategy documents provide quite diverse accounts of the D-DD across the economic, spatial and forest ecosystem scales and the relative degree of severity and impacts. According to the WBISPP (2004), forest clearance for agricultural expansion is the main direct cause of deforestation. However, the WBISPP (2004) estimates need to be revisited in view of the recent rapid increase in investments in large-scale farms for the production of food crops and bio-fuels. Based on the WBISPP projected estimate for 2010, the amount of wood biomass removed from the forest stock for fuel wood and charcoal (26.6 million tons) is much greater than that removed by clearing for agriculture (3.6 million tons). Charcoal is particularly important in the woodlands, which supply most of the 3 million tons or more of charcoal burnt each year in Ethiopia's major cities and towns (Bekele and Girmay, 2013).

The CRGE strategy document, on the basis of assessment of the relevant literature, identified small-scale agriculture as being the most important direct driver of deforestation while fuel wood extraction and logging being the most important direct drivers of forest degradation (FDRE, 2011a).

The other important source document is the national R-PP. During the R-PP preparation process, based on the information gathered from focus group discussions with forest-dependent communities, national and regional consultation workshops, questionnaire surveys, literature review and discussions with practitioners, the conversion of forest lands for small and large scale agriculture as well as increased extraction of wood for energy and construction purposes were identified as the most rampant direct D-DD. Whereas the weak institutional and legal instruments, demographic pressure and economic factors were identified as the indirect or underlying-DD (R-PP, FDRE, 2011b). According to the R-PP assessment (FDRE, 2011b), the direct and indirect D-DD are synthesized and described as shown below.

Gaps in implementation of the forest policy and regulations: implementation of forest policies, proclamations, related laws and regulations is very weak for various reasons. Some of the barriers could be lack of financial and human resources, and or poor institutional capacity; absence of proper implementation guidelines in place, and for long time, structuring and restructuring of the forest governance system at the national and regional levels, limiting the forest sector representation at the department or expert level.

Tenure/unclear forest user rights: forest-dependent communities and those local communities, whose livelihood depends directly or indirectly on forest resources, are uncertain about their use-rights over the forests in their localities. This has left the forests as classic 'open access' resources and everybody has access and no proper control was exerted from the formal or customary mechanisms. This has remained a disincentive to forest-dependent communities to invest in forest management and development activities.

Absence of clear benefit sharing mechanisms: despite the fact that there are proclamations that define the rights of local communities to share economic benefits from forest management programs, the implementation lacks the required institutional instruments such as standards, directives or guidelines as appropriate. The absence of such operational procedures on benefit sharing created precedence for loose management and protection of the resources by local communities.

Lack of private investment in forestry development: promotion of investment in agricultural development such as in horticulture, coffee, other export oriented crops (e.g., Sesame) have been highly encouraged and substantial private sector involvement is achieved. Although there are attractive incentive provisions for the forest sector investment in the proclamations, there are hardly any private investments in forestry development. The focus currently is on promoting forest management, particularly natural forest and towards conservation rather than production by local communities.

Weak law enforcement: the regulatory system is inadequate and inefficient resulting in weak enforcement of existing laws. Although the federal and regional forest proclamations (e.g., in Oromia) clearly show applicable legal consequences for forest trespassers and offenders, enforcement of those penalties are not realized due to lack of guidelines and implementation procedures.

The R-PP attempted differentiating the direct drivers causing deforestation and those causing degradation. As shown in Tables 1 and 2 below, the relative importance and level of impacts of the direct and indirect D-DDs are described in a summarized form in the R-PP.

Table 1: Direct drivers of deforestation in Ethiopia and the relative level of impacts.

Direct Drivers of deforestation	Level of impact
Expansion of traditional smallholder agriculture in forest areas driven by population growth of communities around forests.	Large impact
Expansion of large-scale commercial agriculture and other development activities including road networks and mega development projects such as hydroelectric dams.	Large impact
Population growth due to government settlement programs relocating people to forest areas.	Large impact
Increased extraction of wood and other forest products following massive population growth and the resultant high domestic energy demand.	Medium impact
Forest fires related to raising livestock (pasture improvement activities) and making charcoal, due to poor incentives to local communities for sustainable forest use and weak forest protection.	Medium impact

Source: R-PP Country Report (FDRE, 2011)

Table 2: Direct drivers of forest degradation in Ethiopia and the relative level of impacts

Direct drivers of forest degradation	Level of impact on
Expansion of smallholder traditional agriculture following population growth in forest areas.	Low impact
Expansion of large-scale development activities.	Low impact
Population growth due to government-led settlement programs in forest areas.	Low impact
Wood extraction and other forest products collection following population growth in forest areas and the resultant high wood energy demand.	Large impact
Forest fires related to livestock raising combined with no incentives to protect forest land.	Medium impact

Source: R-PP Country Report (FDRE 2011b)

There are now available results from recent regional and national studies on the types and relative impacts of the D-DDs. A study on the analysis of causes and strategy options to address deforestation and forest degradation in Oromia region (OFWE, 2014) provides detailed assessment of the forest history, deforestation trend, the main drivers and agents of deforestation in main forested landscapes in the region. The report indicates that small-scale subsistence and cash crop agriculture and commercial coffee are mainly affecting moist forests while commercial agriculture expansion is affecting high woodlands, and fuelwood collection and livestock are affecting lowland woodlands.

For instance, the moist forest ecosystem in Odo Shakiso Woreda, which is a deforestation hotspot, the main D-DDs are small-scale subsistence and cash crop agriculture and mining (both formal and informal), combined with large-scale investments in coffee production. Whereas in Dano Woreda, which is a dry Afro-Montane forestland, uncontrolled livestock grazing, wood fuel extraction and small-scale farming are the main D-DDs. In the high woodland ecosystems, like that of the Jardaga Jarte Woreda, large-scale agriculture investment and expansion is the main D-DD, particularly commercial sugarcane production. In these woodlands, small-scale agriculture and overgrazing due to in-migration are also important drivers. In the lowland woodlands, like that of the Yabello Woreda, unsustainable livestock grazing combined with increasing expansion of small-scale cereal cropping are the main drivers (OFWE, 2014). With regard to the underlying drivers of deforestation and forest degradation, the report suggests that for agriculture (both for commercial and subsistence), national policies and economic factors related to national growth strategies are the main drivers whereas population growth and land tenure security were identified as main drivers of small-scale farming.

Table 3: Drivers of deforestation and forest degradation by forest ecosystem, sector or commodity types and agents in Oromia region

Forest ecosystems	Drivers	Impacts	Agents
High Forests (Moist and dry high forests)	Small-scale cultivation	Deforestation	Small-holder farmer
	Forest fire	Deforestation / Degradation	Variable agents—including small-holder farmers, hunters, unknown
	Forest-coffee farming	Degradation	Small-scale and commercial coffee farmers
Woodlands (high and lowland woodlands)	Small-scale cultivation	Deforestation	Small-holder farmer
	Medium/large-scale commercial farming	Deforestation	Commercial farmer
	Livestock grazing	Deforestation / Degradation	Small-holder farmer
	Fuel wood (firewood and charcoal) extraction	Degradation	Small-holder farmers and fuel wood sellers
Sectors/commodity types			
Energy/Biomass		Deforestation / Degradation	Small-holder farmers and fuel wood sellers
Livestock grazing/dairy and meat		Degradation	Commercial and small-scale farmers
Wood industry/Unsustainable timber extraction		Deforestation / Degradation	Commercial enterprises, communities and households
Investment/Coffee		Degradation	Commercial and small-scale
Agriculture supply chains/Khat, Sesame, maize/		Deforestation	Commercial and small-scale

Source: Adapted from OFWE (2014)

Results from another pilot REDD+ project in Oromia region, the Bale Mountains Eco-region REDD+ project (OFWE et al., 2014), identified agricultural expansion and unsustainable firewood and charcoal production as main drivers of deforestation. The agents are smallholder farmers (local residents and migrants into the region) clearing for subsistence production. The recent increase of in-migration into the region, for instance in Harena Buluk and Nansabo Woredas, coupled with the local population growth has made population main cause of deforestation in the area. The key underlying causes that contributed to the proximate drivers were identified as weak law enforcement, absence of forest managing institution at grass roots level, poverty, lack of poor access to education and population growth. Based on the analysis of the historical relationship between the main agents, key drivers and underlying causes, the following sequence of causative steps were identified to illustrate process of deforestation in the past and in the future:

- Small-holder farmers wish to achieve food security and improve their levels of income
- Income growth is mainly dependent on agriculture as opportunities to move into other sectors are often limited.
- Opportunities to intensify agriculture are often limited. By contrast, expansion of farmland into forest areas is relatively easy under current conditions, despite the law.
- Weak forest law enforcement, low investment in forest protection and limited opportunities for current forest-users to protect their resources all facilitate expansion of farmland into forest areas
- Absence of alternative energy sources and construction material lead the farmers to cut trees for household energy and construction
- Fast population growth in the region forced the extra people to clear forests for their subsistence
- These process is accelerated by rising commodity prices, improving road networks, rising populations and other economic development factor

A recent report by Melaku Bekele et al. (2015) looked into the major drivers of deforestation and forest degradation across the country based on analysis of largely secondary data. The paper identified different drivers, agents and level of impacts of deforestation and forest degradation in the country as shown in Table 4 below.

Table 4: Direct drivers of deforestation and forest degradation, their agents, and the level of threats they impose.

Description	Direct driver/activity	Agents	Significance/threat level	
			Forests	Woodlands
Deforestation	Small-scale agriculture (cereals and pulses)	Farmers (smallholders)	High	Medium
	Small-scale agriculture (perennials and	Farmers (smallholders)	High	Low

Description	Direct driver/activity	Agents	Significance/threat level	
			Forests	Woodlands
	coffee)			
	Commercial agriculture	Investors (foreign direct investment)	Medium	High
		Investors (local)	High	High
Degradation	Fuelwood	Collectors and producers	High	High
	Grazing	Local farmers	High	Medium
	Forest fire	Nature/squatters	Medium	High

Source: Melaku Bekele et al. (2015)

The most recent study on D-DDs in Ethiopia is the countrywide study on the causes of deforestation and forest degradation commissioned by the Ministry of Forest and Environment (MEFCC, 2015). The mid-term report from this study provides a comprehensive review of the forest history, trends of deforestation and the main drivers of deforestation and forest degradation on region basis (for the selected regions in the study). The report identified agricultural expansion for commercial and subsistence farming as the main driver of deforestation in all studied regions except in Somali and Afar regions, in which case charcoal and fuel wood extraction are the main drivers of deforestation in the woodlands. The practice of shifting cultivation in Benishangul-Gumuz and Tigray regions (Desa's forest, Raya-Azebo and Kafta-Mesile forests) is aggravating deforestation. The use of fire for land clearing and hunting in Benashangul-Gumuz region is main driver of woodland degradation. Investments in coffee, tea and rubber plantations expansions were reported to have caused loss of large tracts of moist forests in the SNNPR.

The report (MEFCC, 2015) lists the main underlying D-DDs as increasing population growth, in-migration, settlement expansion, agricultural investment, poverty, lack of sense of ownership and lack of clear legal policy framework. By category, expansion of commercial agriculture in SNNPR, Gambella and Benashangul-Gumuz regions caused loss of high forests and woodlands. Settlements and in-migration are common D-DDs in Tigray, Amhara, Gambella and Benishangul-Gumuz regions. In Afar, Somali and Tigray regions, droughts increasingly triggered people to resort to charcoal production for income generation. Weak forest policy and regulation enforcements have been reported to aggravate the deforestation and forest degradation in the entire studied regions except Tigray. Summary of the main D-DDs from the MEFCC (2015 report disaggregated by regions are presented in table 5 below, although these results are subject to further validation.

Table 5: Summary of main drivers of deforestation and forest degradation by region

Regional States	Drivers of deforestation and forest degradation
Oromia*	Small scale cultivation, forest fire, forest coffee farming, medium/large scale commercial farming, livestock grazing and fuel wood (firewood and charcoal) extraction
Tigray	Droughts and natural climate fluctuations; Agricultural expansion; population pressure
Afar	Land use changes are due to fluctuations in water level; charcoal making
Amhara	Shifting cultivation; Cropland expansion; population pressure
Benishangul-Gumuz	Shifting cultivation, Cropland expansion; Droughts, logging, fire
SNNPR	Agricultural expansion; Population pressure, shifting cultivation; Droughts
Somali	Charcoal making
Gambella	Shifting cultivation

Source: MEFC, 2015

3.4 Proposed REDD+ Strategy Options for Ethiopia

The REDD+ strategy options are divided into two as investment and policy or institutional (figure 3). The R-PP presented a review of the current strategies in different development programs that are targeted directly or indirectly to address deforestation and forest degradation within the existing legal and policy framework (FDRE, 2011) as shown in Box 1 below.

Box 1. Existing strategies as reviewed and presented in the R-PP
<ul style="list-style-type: none"> • Plantation forest of exotic species (especially <i>Eucalyptus</i> and <i>Cupressus</i>) • Agroforestry • Area closures of deforested areas for natural forest regeneration, • Protected areas of natural forest, National Parks • CDM project areas related to plantations/reforestations (A/R), • Devolution of forest management through participatory forest management (PFM), • Traditional/ customary forest management practices, • REDD+ pilots • National Bio-fuel Strategy: national biogas program, rural electrification (renewable energy), dissemination of fuel efficient improved stoves • Food Security Strategy • Integration of REDD+ into budget, laws, policy, strategy, program, plan and projects

In the review work of EDRI earlier in 2010 (box 2), in an effort to identify and prioritize the main strategic options to mitigate deforestation and forest degradation, specifically targeting the main

drivers such as agricultural conversion and unsustainable fuel wood consumption, a combination of levers were proposed focusing on improving agriculture, soil and forest management and adopting alternative clean energy supply and energy efficiency measures as being the basis for Ethiopia's REDD+ strategy.

Box 2. Strategic options as reviewed and identified by EDRI 2010 to mitigate deforestation and forest degradation

Strategic Options	Activity measures
<ul style="list-style-type: none"> Reducing land conversion to agriculture (including pastureland) 	<ul style="list-style-type: none"> Increase farmland productivity Grazing land management and pasture improvement techniques Integrate animal feed and fertilizer production into reforestation Support profitable forestry
<ul style="list-style-type: none"> Limiting the impact of fuel wood consumption 	<ul style="list-style-type: none"> Rural energy production Efficient fuel wood stoves and other cost-effective green technologies
<ul style="list-style-type: none"> Develop sustainable forest management practices 	<ul style="list-style-type: none"> Promote development of wood plantations of fast growing species for fuel wood consumption or timber, enabling sustainable logging. Participatory forest management enabling local communities to be part of decision-making in all aspects of forest management, Protection of forest areas primarily through means of laws
<ul style="list-style-type: none"> Other solutions to improve carbon sequestration 	<ul style="list-style-type: none"> Large-scale afforestation and reforestation program covering 3.0 M ha by 2030

The R-PP also stressed that a series of institutional revisions are needed with regards to local people's rights, institutional capacity and coordination in land use for efficient and effective implementation of the strategic options. The required changes in the enabling regulatory and institutional environment for effective implementation of REDD+ in the country are pointed out in the R-PP as shown in the box 3.

Box 3. Proposed required institutional and regulatory changes in the R-PP to enable effective implementation of REDD+

- Clarify, reinforce and support local people's right: REDD+ will support PFM and the various community institutions set up within PFM.
- Support development of service oriented institution: support for sustainable forest management as well as support to the marketing of products leading to investments
- Better coordinated land use planning to reduce migrations/population increase to avoid loss of forest.

Box 3. Proposed required intuitional and regulatory changes in the R-PP to enable effective implementation of REDD+

- Strengthening the enforcement of laws: deforestation and forest degradation occurs in Ethiopia due to an open access mentality and weak enforcement of laws.
- Other concrete actions to be carried out in order to strengthen law enforcement are:
 - Empowering and strengthening local community organizations;
 - Institutionalizing the required inspection and regulatory activities at the Federal, Regional and Woreda levels;
 - Increasing the number of forest inspectors and the frequency of inspection;
 - Capacity building and empowerment of the inspectors;
 - Creating a wood (timber) product certification system and traceability of origin of timber and
 - Strengthening coordination between the judiciary and public prosecution authorities.

Forestry is one of the key pillars of the CRGE strategy (FDRE, 2011b) and it has identified six strategic levers for the sector that are grouped into three main strategic options, namely, reduced deforestation, reduced forest degradation and increased carbon sequestration. These strategic options are basically targeted to reduce GHG emissions from forestry sources and/or increasing sequestration in forestry sinks.

The pilot REDD+ programs of the Oromia region, project and landscape level strategic options are designed to address the main drivers of deforestation and forest degradation. For instance, the Bale Eco-Region pilot REDD+ project interventions (box 4) are focused on providing options to curb expansion of agricultural activities by smallholder farming (by local farmers, migrants and seasonal settlers), to reduce the incidences of forest fires and to avail alternatives to satisfy fuel and construction wood needs.

Box 4. Main strategic options in the Bale-Eco-region REDD+ intervention

- Agricultural intensification and provision of economic alternatives
- Provision of fuel efficient technology and alternative supply of wood for fuel and construction materials from non-forest lands
- Implementation of sustainable forest management, conservation and Protection and support for effective law enforcement
- Institutional capacity building for government and JFM community, PFM Cooperatives and OFWE
- Development and implementation of Bale Mountains Eco-region Fund

The strategy options for the Oromia Forested Landscape Program by OFWE is currently focused on three main sectors: agriculture, forestry and energy as shown in the Box below.

Box 5. Strategic options for the Oromia Forested Landscape Program		
Primary causes of Deforestation and forest degradation in Oromia		Strategic Intervention Options
Primary Direct Causes	Small-scale agriculture expansion	<ul style="list-style-type: none"> • Forest management investment in deforestation hotspots, including the promotion of Participatory Forest Management • Strengthening extension services on forest management, smallholder agriculture, soil and water conservation, and household energy. • Coordination with several other initiatives in Oromia promoting more resilient and productive agricultural and land management techniques.
	Wood extraction for firewood and charcoal	<ul style="list-style-type: none"> • Forest management investment, including afforestation and reforestation for biomass energy • Coordination with the national cook stoves and the biogas programs to mitigate biomass demand (see below for incentives enhancements and policy).
Primary Indirect Causes	Inadequate land-use planning and enforcement at micro-level	<ul style="list-style-type: none"> • Land-use planning support at woreda level and community levels • Further coordination to promote smallholder land certification.
	Inadequate cross-sectoral policy and investment coordination	<ul style="list-style-type: none"> • State-level activities to promote cross-sectoral coordination, including the establishment of the Oromia REDD+ Steering Committee chaired by the Oromia Bureau Head; and of the Oromia REDD+ Coordination Unit. • Policy development and enforcement (harmonized PFM rules, forest and land certification, incentives for the adoption of renewable energy sources, etc.) • Improvement of incentives (marketing of cook stoves, preparation of benefits sharing mechanism for ER payments, small natural-resource based enterprise operating environment) • Local-level activities to coordinate and leverage existing initiatives to protect and expand forest cover and improve land use. • Information enhancements such as MRV, Forest Management Information System, and strategic communication

As described in the program appraisal document (WBG, 2015) of the OFLP, the prioritized strategic programs are rather focused on local level activities (land use planning support, extension activities

support and PFM), state level activities (institutional capacity building, incentives, safeguards information and management) and emissions reductions (strengthening MRV). The local level activities are focused on Afforestation and Reforestation, PFM and livelihoods.

The **draft national REDD+ Strategy** proposed range of strategic options grouped in three main categories such as targeted measures (focusing on three sectors), policy and institutional measures and crosscutting issues as listed in the box 6.

Box 6. Strategic options and targeted measures in the draft national REDD+ strategy	
Strategic Option categories	Strategic actions
Targeted sector based measures	<ul style="list-style-type: none"> • Ensure Sustainable Forest Management (in high forest as well as woodlands) • Enhancement of Forest Carbon Stock • Agricultural intensification • Reduce Demand for fuel wood and charcoal • Increase supply of wood and charcoal • Improved Livestock Management • Promote supplementary income generation
Policy and institutional measures	<ul style="list-style-type: none"> • Enhance cross-sectoral synergies and stakeholder participation • Forest Governance and law enforcement • Forest tenure and property right • Land Use Planning • Inter-sectoral coordination on planning and joint implementation
Cross-cutting Issues	<ul style="list-style-type: none"> • Capacity Building • Ensure full participation and equitable benefit flow to women • Demand-driven Research and research and extension linkage • Benefit sharing

Source: Draft National REDD + Strategy (2015)

The national Drivers of Deforestation study report MEFC (2015) prioritized the proposed strategies using a two phase criteria and suggested three key priority strategies such as agricultural intensification, protected forests and participatory forest management, sustainable fire wood and charcoal use, all falling in the targeted measures. These are shown in yellow shaded color in the Box6 above.

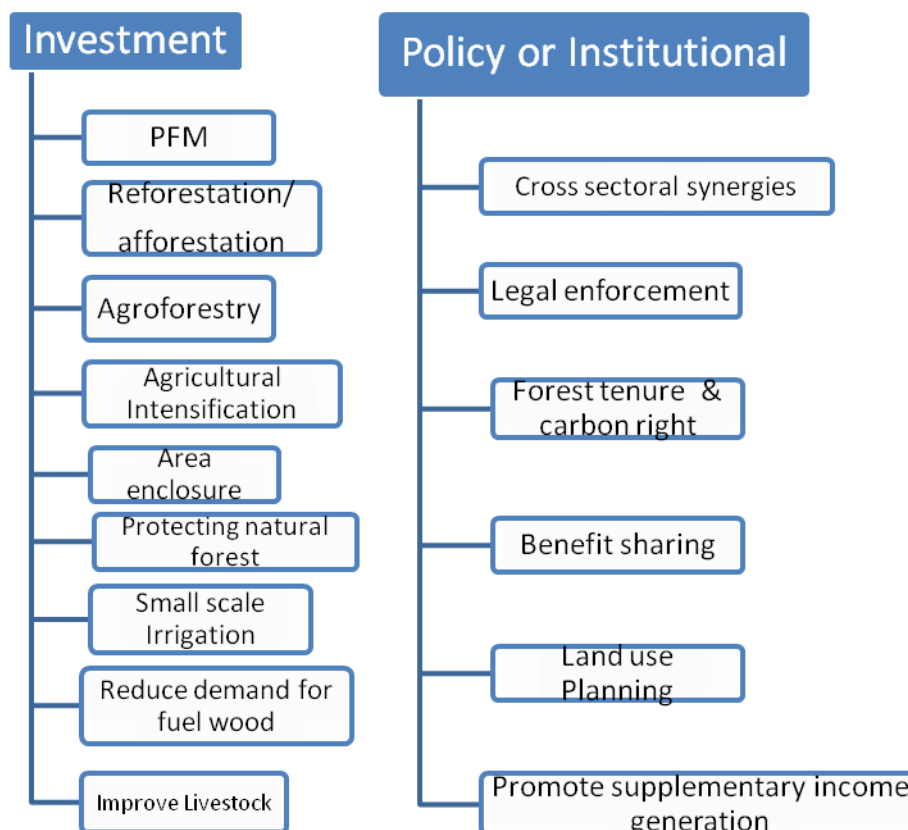


Figure 3: REDD+ Strategic Options

Source: MEFCC (2015)

3.5 Overview of Ethiopia's REDD+ Readiness Process Under FCPF

Ethiopia is a participant of World Bank's the Forest Carbon Partnership Facility's (FCPFs) REDD+ program. The full cost for Ethiopia's REDD+ Readiness process is funded by a grant from the World Bank (USD 3.6 million) and a financial support (USD 10 million) by Norway and UK through the World Bank's BioCarbon Fund. The FCPF of the World Bank serves as a financial trustee for the additional funding provided by donors and the World Bank provides the technical advice and Implementation support. Ethiopia's REDD+ readiness process was officially launched in January 2013 (Figure 4) and the National REDD+ Secretariat at the Ministry of Environment and Forest is responsible for planning, execution and coordination of the REDD+ Readiness Process. The REDD+ Readiness Process is basically the implementation of different activities identified in the R-PP document. The major activities outlined in the R-PP document for implementation include putting in place REDD+ management arrangements across different levels; organizing and consulting stakeholders; preparation of the national REDD+ Strategy; setting reference levels and MRV system and preparation of M & E framework. The implementation of the R-PP covers the period of 2013-2018. As indicated below, Figure 4 reflects only REDD+ Readiness activities under the FCPF grant. Further, through the additional financial support, the following activities are being implemented

from 2016 to 2018 (the new extended grant completion date): *(i) finalization of the development the MRV system; (ii) institutionalization of the MRV; (iii) undertaking of analytical studies as inputs to the development of bankable regional REDD+ investment programs in the three pilot regions (Amhara; Tigray; and Southern Nations, Nationalities and Peoples Regional State (SNNPRS)); and (iv) development and finalization of bankable REDD+ investment programs in the above three regions.*

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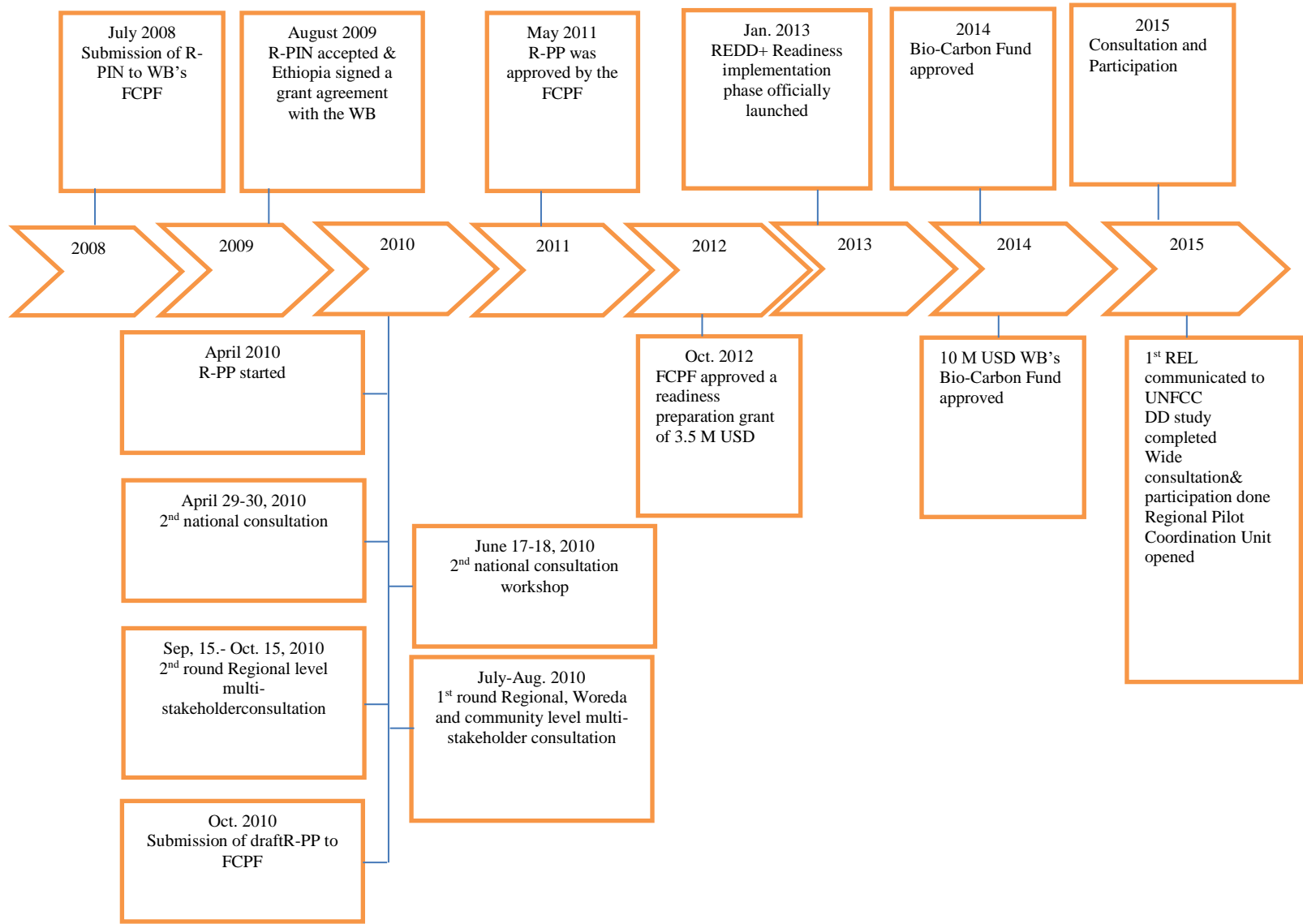


Figure 4: Ethiopia's REDD+ Readiness Process under FCPF

3.6 REDD+ Management Arrangement

The Federal level REDD+ Management arrangement (see section 7.3, Figure 5) is put in place and is already functional. The Federal level management arrangement includes a steering committee, a technical working group and 3 REDD+ task forces (REDD+ SESA TF, RLMRV TF and REDD+ Strategy TF) each with defined terms of reference. This REDD+ management arrangement is gradually moving to embrace the regional state level REDD units. Regional Steering Committee and Regional Technical Working Group have been functional in Oromia Region, with representatives from regional government bureaus, OFWE, the forest-dependent peoples and civil society organizations. Similar arrangements are being followed in other regional states (SNNPR, Tigray and Amhara) with REDD+ Coordination Units established and coordinators recruited.

Consultation and Participation

The Cancun safeguards aim not only to mitigate the risk of adverse social and environmental impacts of REDD+ activities, **but also to actively promote benefits beyond carbon emission reductions**, such as respect for the rights of local communities, enhancing biodiversity, improving forest governance and empowering relevant stakeholders by ensuring their full and effective participation. The process of consultation and participation is central to the effective implementation of REDD+ readiness. **A national REDD+ Consultation and Participation Plan is currently under preparation.** This plan will provide a framework that ensures ownership, transparency, and inclusiveness of effective and informed consultation and participation by relevant stakeholders in the process of implementing the R-PP. The complex and dynamic consultation process at the national level will be guided by Consultation and Participation Plan together with Awareness and Communications strategy and a Conflicts and Grievances Management Plan all of which are under preparation. Awareness creation activities have been going on since January 2013 using different communication channels including workshops, SMS messages, brochures, TV and Radio message. A communication strategy is under design and will identify REDD+ stakeholders and set out the mechanism to reach the different stakeholders.

REDD+ Strategy formulation

The National REDD+ Strategy will be informed by findings from different on-going technical studies including drivers of deforestation and degradation, SESA/ESMF study, analysis of the legal and institutional arrangement for REDD+ implementation, consultation and participation plan and national forest inventory. A draft REDD+ strategy was finalized in November 2014 which provides the framework and strategic goals of the national REDD+ implementation.

The national drivers of deforestation and forest degradation identified drivers of deforestation and degradation including agents and causes disaggregated spatially across Ethiopia and prioritized strategic options to address the identified drivers. The **SESA** study for the REDD+ program produced four inter-related documents: Strategic Environmental and Social Assessment, Environmental and Social Management Framework (this document), Resettlement Policy Framework and Process Framework. These four safeguard documents provide clear directions for managing and mitigating the environmental and social risks and impacts of future investments (projects, activities, and/or policies and regulations) associated with implementing the country's REDD+ strategy.

National Forest Inventory, Reference Level and MRV system

Ethiopia is now designing and implementing robust and accurate system for monitoring and measuring carbon emissions and removals to enable the country to report and verify actions on deforestation and forest degradation and other activities aiming to conserve, sustainably manage and increase forest carbon stocks. The Ministry of Environment and Forest on behalf of the government of Ethiopia and the Food and Agriculture Organization of the United Nations signed an agreement in August 2014 for the provision of technical assistance for the implementation of a national forest monitoring and MRV system for REDD+ Readiness in Ethiopia. A national forest inventory has been undergoing since March 2014. Land use land cover mapping is now completed while validation is soon to be finalized.

Regarding the development of a FRL/FREL in Ethiopia, the basic elements that have been defined at the moment include: National Forest Definition, scale, scope, the approach to establish FREL/FRL, and the calculation of activity data and emission factor. A version zero national forest reference level has been produced and version 1 reference level will be ready in July 2015. As the REDD+ scheme in Ethiopia is expected to deliver emission reductions and other co-benefits, the MRV system will be designed to help track a range of other indicators such as biodiversity and social benefits. The national MRV system will consider the development of innovative participatory approaches aimed at engaging forest-dependent communities in monitoring and verification work build understanding and local ownership. In this regard, a PMRV pilot project is being designed jointly with the involvement and support of the MRV and Safeguards components of REDD+ Secretariat, CIFOR and FAO.

3.7 Situation of REDD+ Projects in Ethiopia

REDD+ implementation in Ethiopia is the responsibility of different entities including NGOs (local and international) working with regional bureaus and government sector. REDD+ implementation is largely in its early stage and activities on the ground will soon be intensified in the coming few years. Much of the on-going activities are design (project level) and/or readiness process (national level). A summary of the state of the different REDD+ projects in the country is given below (Table 6).

Bale Mountains Eco-region REDD+ Project is a pioneer REDD+ initiative jointly implemented by FARM Africa/SOS Sahel and OFWE with the financial support from the Royal Norwegian Embassy (major funder), Royal Netherlands Embassy and Irish Aid. The project design process started in 2010 and conducted assessments and technical studies to identify drivers of deforestation and degradation and prioritizing strategic options. Additional technical studies were taken up by a consortium of consulting firms to determine the reference level (RL) and emission factors (EF). A series of consultations were carried out between 2010 and 2012 involving a range of stakeholders; local communities, local and regional level government offices, Community Based Organizations, and non-government organizations. The consultation process was conducted in accordance to the Cancun social and environmental safeguard elements where stakeholders at all level were consulted

following the free, prior, informed, consent (FPIC²) approach on issues related to project design, project life time and benefit sharing among others. Since the Bale REDD+ Project is one of the 6 components of the bigger Bale Eco-region Sustainable Management Project (BERSMP), much of the community organizations are built on the experience of the previous PFM activities. The design phase also involved the preparation of manuals for carbon stock determination and different capacity building activities for experts, community members and other stakeholders. It is the first REDD+ project in Ethiopia registered under the Voluntary Carbon Standard (VM0015) and a Project Design Document (PDD) is finalized and project validation and registration is near to completion.

Major implementation activities identified include sustainable livelihood development activities, sustainable energy and construction material, sustainable forest management and institutional strengthening. Since 2012, implementation activities include sustainable forest management and sustainable energy. A total of 382,000 ha of natural forest is now under Joint Forest Management involving over 100 forest management CBOs implementing SFM with the Regional government. Promotion of improved stoves to ca. 24,000 community households estimated to save 90,000m³ wood in 3 years. Additional interventions soon to be implemented include forest-based livelihood diversification through sustainable extraction of Non-timber forest products (NTFPs) (such as coffee and honey production), community-based wood lots, agricultural intensification, institutional strengthening and forest law enforcement. Preliminary change detection analysis in early 2014 indicated that the project intervention led to a reduction in deforestation of a total of 2000ha per annum which needs to be verified.

REDD+ Participatory Forest Management in South-West Ethiopia: This is the second REDD+ initiative started in 2013 in four different Woredas (Masha-Anderacha-Gesha-Nono Sele) in the south-western part of Ethiopia undertaken by a local NGO, Ethio-wetlands Natural Resource Association. The REDD+ project is an extension of a long-standing activity of the project in the area of NTFP and PFM. The REDD+ project aims at developing model for community driven REDD+; demonstrate how cost effective carbon storage by avoiding deforestation can be achieved in a mutually inclusive way with objectives related to sustainable development and poverty reduction of forest dependent communities. Project activities are being undertaken in ca. 240,00ha of high montane forests. So far, the project has identified drivers of deforestation and strategic options and assessed the social and environmental safeguard issues. The REDD+ project is being implemented in forest areas where Participatory Forest Management was being implemented as part of a previous project activity. A local level, participatory MRV aligned to the national MRV system is under establishment. Apart from PFM, additional interventions including livelihood diversification through improved forest management and forest-based enterprise development.

Yayu REDD+ Project: The project is jointly initiated in 2012 by a consortium of NGO's, the Environment and Coffee Forest Forum, Horn of Africa Regional Environment Center & Network and Inter-Church Cooperation Organization (ICCO). The project aims to avoid **deforestation and forest degradation while promoting carbon stocks conservation and enhancement (REDD+), coffee genes and forest biodiversity conservation and poverty reduction through the creation and implementation of conservation areas through the strengthening** of OFWE and community based

²The free, prior, informed, consent (FPIC) mentioned under Sub-section 3.7 is specific to the Bale Mountains Eco-region Project, but not to the National REDD+ safeguards instruments.

organizations in Illubabor Zone in Oromia National Regional State, Ethiopia. The project area covers a total of 168,610 ha. The project is under initiation and feasibility study is completed which will be followed by project design phase. Based on the feasibility study, average annual deforestation is estimated as 1.2% and the number of project beneficiaries are estimated at 150,000 households. Moreover, the project is expected to generate a total of 16,637,271 tCO₂ over 20 years.

Oromia Forested Landscape Program is an integrated landscape approach that combines sector-based investments with cross-cutting policy reforms within the jurisdiction of the Oromia Regional State. This is a national pilot implemented by OFWE and MEFCC with a financial support from Norway for the design and emission reduction phase and the World Bank providing technical support and a mobilization grant which covers the implementation cost. The program was initiated in May 2013 and since then a number of design elements were developed. A number of technical studies including drivers of deforestation and degradation, legal and institutional arrangement for REDD+ implementation, developing reference levels and consultation and participation plan are finalized. A project implementation manual (PIM) is currently under preparation. The OFLP implementation will put in place enabling environment (policy, law and institutions) across the regional state and local level interventions **in 47 forested Woredas** (deforestation hot spots) with limited on-ground intervention in the remaining forested landscapes in the region. Local level activities include land use planning, extension services and forest management investments (PFM and Afforestation/Reforestation) in the 47 hotspot **Woredas** while ensuring effective coordination with World Bank financed on-ground projects like SLMP and AGP within the region. A safeguards assessment is currently undergoing which will identify the social and environmental impacts of project implementation and designing a management framework to mitigate the negative impacts.

Currently, the program has established regional level institutional arrangements with a well-staffed coordination unit, Oromia REDD+ Coordination Unit (ORCU) housed in the Oromia Forest and Wildlife Organization (OFWE) and is accountable to the regional vice president office. In addition, there are also REDD+ steering committee and a technical working group with defined roles and responsibilities. This institutional arrangement has been operational throughout the design phase which will be concluded by the end of this year (December 2015). A project Appraisal Document (PAD) is in the negotiation process with the client. A discussion is undergoing on a revised and expanded institutional structure for the implementation phase (2016-2020) of OFLP and an institutional arrangement that goes from regional level down to Woreda level involving different government bureaus at regional and Woreda level is proposed.

Table 6: List of organizations involved in piloting REDD+ in Ethiopia

REDD+ initiative	Location	Scale	Size (ha)	Status	Proponent
Bale Mountains Eco-Region REDD+ Project	Oromia	Project level	500,000	Under validation	OFWE
REDD+ Participatory Forest Management in South-West Ethiopia	SNNPR	Project level	>240,000	Initiated	SNNPR
Yayu REDD+ Project	Oromia	Project level	190,000	Initiated	OFWE
Oromia Forested Landscape REDD+ Program*	Oromia	Jurisdictional	8.7 Million*	Design phase completed	OFWE

*This figure is provided in the current ESMF report of OFLP (2015) and in the recent PAD of the OFLP (2015), page 6.

3.8 Forest related CDM Projects

The Kyoto Protocol (1997) came up with three flexible mitigation mechanisms linked to carbon markets namely, **Clean Development Mechanism (CDM)**, **Joint Implementation and International Emissions Trading (JIIE)**. Among these three, CDM projects have been initiated in many developing countries with the aim of generating **emission reduction credits** that can be sold in the compliance markets. CDM projects are common in the forestry, energy and waste management sectors. In the forestry sector, afforestation/reforestation activities are eligible for CDM projects. Reforestation and afforestation CDM projects in Ethiopia worth noting are the Humbo Ethiopia Assisted Natural Regeneration Project, the Sodo Community Managed Reforestation (Forest Regeneration) Project and the Abote Community-Managed Reforestation Project.

The Sodo Community Managed Agroforestry & Forestry Project is located in Sodo Zuria in SNNPRS. It was initiated with the objective of enhancing carbon sequestration in bio-diverse native forests and contributing to poverty alleviation through the flow of benefits in the form of carbon credits and other non-monetary benefits. The project is validated under the Gold Standard Foundation, the Carbon Fix Standard and the Climate Community Biodiversity Standards. A total of 189,027 tCO₂ (35 years crediting period) is certified in accordance with the Gold Standard. First round 50,000 tCO₂ Certified Emission Reduction purchase agreement is signed with Forest finance (1ton = USD 9).

The Humbo Ethiopia Assisted Natural Regeneration Project in SNNPRS was the first CDM project and was initiated by World Vision-Ethiopia. It is a practical project that has been operating in the country since 2006. The project uses an afforestation/reforestation approach on a site of 2728ha that was severely degraded due to excessive fuel wood extraction and overgrazing. It provides multiple benefits including enhancing GHG removal by sinks, promoting native vegetation and biodiversity, reducing soil erosion, and provision of an income stream for communities. The project achieved Gold Level Validation under the Climate Community and Biodiversity standards in 2011, and in October 2012 became the first CDM project in Africa to sell Certified Emission Reductions. The 30-

year project will sequester an estimated 880,295 tCO₂ with total revenue of USD 3,961,328– the equivalent of USD 4.5/ton (Humbo AR-CDM PDD 2009).

The Abote Community-Managed Reforestation Project is a joint initiative by World Vision and the local community in Oromia. It aims to rehabilitate degraded land covering a total area of more than 8000ha. The project, which started in 2010, has been validated but its certification is yet to be done.

4. Administrative, Policy and Legal Frameworks Relevant to ESMF

4.1. National Administrative, Policy and Legal Frameworks Relevant to ESMF

National Legislative, regulatory, and policy regime

Comprehensive Legal and Policy review related to REDD+ program implementation is presented in the SESA document. This sub chapter of the document describes specifically environmental and social policy and legal requirements for the proposed REDD+ strategic options.

4.1.1. The Constitution of Ethiopia

The Proclamation of the Constitution of the Federal Democratic Republic of Ethiopia (Proclamation No 1/1995) has a special article on sustainable development, natural resource and the environment. Article 43 explains about people's right in development while Article 44 Sub Article 1, Article 51 & 52 focus on natural resource governance, and Article 92 focus on the environment. Article 43 satisfactorily stresses the people's right to improved living standards and to sustainable development, and consultation and participation regarding matters that may affect their wellbeing.

Article 44 Sub Article 1 states that "All persons have the right to live in a clean and healthy environment." Furthermore, concerning compensation to Project Affected Persons (PAPs), Sub Article 2 stresses that: "All persons who have been adversely affected or whose rights have been adversely affected as a result of state programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate state assistance. "

Article 51 (5) gives authorization to the federal government to enact laws for the utilization and conservation of land and other natural resources, while Art. 52 (2) (d) authorizes the regional states to administer land and other natural resources in accordance with federal laws.

Article 92 sub article 3 focuses on public consultation and participation by stressing that "People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies or projects that affect them directly."

Other national Key environmental and social laws and regulations are presented in the matrix table below. The table shows regulations, key elements and responsible institutions for the execution of the regulations.

Table 7: Responsible institutions for policy and regulation promulgation

Regulation	Purpose	Responsible Institutions
Environmental policy	<p>At the federal level, there is an approved environmental policy already in place. The overall objective of the policy is to promote sustainable social and economic development of the country through the conservation and sustainable utilization of the natural, manmade and cultural resources and the environment of the country. It specifies the policy objectives, key guiding principles. Sectoral and cross-sectoral policy frameworks and implementation strategies to be followed so that the overall objectives can be realized.</p> <p>For REDD+ Safeguard instrument implementation, the policy framework give direction on the need to establish legal reference for people's participation in the natural resource management, provides framework for monitoring and evaluation of any development project from sustainable environment management perspective.</p>	Ministry of Environment, Forest and Climate Change
Social Policy	<p>The major objective of the social policy is to protect poor and vulnerable individuals, households, and communities from adverse effects. Moreover, the policy framework is interested to increase social status and progressively realize the social and economic rights of the excluded and marginalized.</p> <p>This national social policy is the foundation for involvement of local community in the REDD+ process as well as benefiting them from the carbon market. Equitable sharing of local community is the major principle of the REDD+ mechanism. Thus, this social policy is the foundation for participation of various stakeholders and respect right to use and share benefits from REDD+ program implementation.</p>	Ministry of Labour and Social Affairs
Forest development, conservation and utilization policy and strategy	<p>General objective of the policy is to conserve and develop forest resources properly so that there could be sustainable supply of forest products to the society (hence satisfying the demand) and contribute to the development of the national economy.</p> <p>The policy statements also encouraging public and private sectors to participate in forest development; improving productivity of forests; and also improving, replicating and distributing suitable tree species.</p> <p>The policy gives due emphasis and precedence for local community in the development of forest resource. It stresses the participation of local communities in the management of, and sharing of benefits from, State forests.</p> <p>Thus, the policy framework gives legal stand for proper implementation of REDD+ safeguard instrument specially in participating the local community and forest dependent community.</p>	Ministry of Environment, Forest and Climate Change

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Regulation	Purpose	Responsible Institutions
Agricultural Policy	<p>Ethiopia agricultural policy put as its main goal to intensify and transform subsistence agriculture into market oriented agriculture, and which requires the modern inputs, notably improved seeds and fertilizer. The policy further identifies focus areas where intensification is required.</p> <p>This policy paves ground for implementing the proposed REDD+ strategic option which is intensifying small scale agriculture to reduce the expansion to forest land. Furthermore, the Ministry by establishing environmental unit is working to make the agricultural investment activities to be environmentally friendly.</p>	Ministry of Agriculture
Energy Policy	<p>The policy put general direction wherein, among others, expansion of forests and agro-forestry is needed to accelerate economic development of the country. Other policy areas that are given due attention include energy saving. It is one of the policy areas where improvement of saving mechanisms for energy production, transportation and utilization shall be devised. Following this policy, different programs were designed and are being implemented.</p> <p>In order to reduce forest degradation caused by fuel wood extraction from the forest the Oromia Deforestation and forest degradation study and national draft REDD+ Strategy showed that using Cook stove is cost effective measure. The policy direction also gives emphasis on promotion of environmentally friendly technology including Cook stoves. Thus, the energy policy help implementation of the REDD+ strategic option related to cook stove and the mitigation measures proposed attached to it.</p>	Ministry of Water, Irrigation & Energy
National Biodiversity Strategy and Action Plan	<p>The National Biodiversity Strategy and Action Plan provides guidance towards the effective conservation, rational development and sustainable utilization of the country's biodiversity. It encourages and supports public participation in the conservation, development and use of biological resources.</p> <p>The strategy objectives are in line with the principle of REDD+ implementation that encourages the conservation of forest vegetation resources and enhancement of co-benefits of the forest resources such as conservation of non woody flora. Moreover, the strategy gives direction to conduct ESIA and to avoid impact on biodiversity resource of the country.</p>	Ethiopian Biodiversity Institute
Proclamation on Environmental Impact Assessment (Proclamation No.299/2002)	<p>The Proclamation clearly explains the requirement of an Environmental Impact Assessment (EIA) procedure for all programs, and describes the processes and procedures to be followed by program proponents with respect to EIAs. The Proclamation is an instrument to make development projects environmentally and socially acceptable and make the development project sustainable.</p> <p>Most of the International REDD+ Safeguard principles addressing environmental and social risks of projects are explained in the EIA proclamation. Moreover, the proclamation give emphasis on public consultation requirements and the comments made by the public and in particular by the communities likely to be affected by the implementation of</p>	Ministry of Environment, Forest and Climate Change

ESMF for the implementation of REDD+ program in Ethiopia

Regulation	Purpose	Responsible Institutions
	a project need to be taken into consideration. Thus, the national and regional EIA proclamation lay concrete ground for the implementation of REDD+ safeguard instruments.	
Sectoral Environmental Impact Assessment guideline (2000)	Sectoral Environmental Impact Assessment guidelines provide environmental and social focus areas of sectors, standards especially for forestry, irrigation, mining, agriculture and other industries. The strategic options of REDD+ has indicated the involvement of different sectors to avoid deforestation and forest degradation. Thus, during implementation phase, the sectoral guidelines provide guidance for proper formulation of ESIA documents for different interventions. However, these guidelines are at draft stage and need to be approved by the concerned office (MEFCC).	Sectoral and Cross-sectoral government offices
Land Expropriation proclamation & compensation (135/2007)	The proclamation explains procedures on how to implement settling of concerns related to entitlement, valuation of land asset, customary laws, grievance redress and others. Generally, the proclamation helps to reduce and mitigate the impacts due to the expropriation of landholdings for public purposes. This gives legal background and facilitate the proper implementation of the subsequent REDD+ safeguard instruments, RPF and PF.	Land Administration and Certification Bureau
Rural Land Administration and Land Use proclamation no.456/2005.	The most relevant provision regarding the government's effort to increase forest cover is article 13 (6). The title of this article reads as land use planning and proper use of sloppy, gully and wetlands. Sub-article 6 states that rural lands with slope of more than 60%, shall not be used for farming and free grazing; they shall be used for development of trees, perennial plants and forage production. Land use plan is one of the strategic agenda that is going to be implemented in REDD+ implementation phase so the proclamation helps to reduce risk and enhance the benefit related to land use planning.	Ministry of Agriculture
Climate resilience strategy for Agriculture and forestry, 2015	The country has recently released a resilience strategy document for Agriculture and Forestry. This strategy is directly relevant for the REDD+ implementation. The document sets out a strategy to ensure Ethiopia's economic growth in agriculture is climate resilient. It focuses on the sectors of responsibility covered by the Ministry of Agriculture (including crops, livestock and forestry). These sectors are the most vulnerable to the impacts of climate change, and play a major role in Ethiopia's economy, contributing 43% of GDP, around 80% of employment and approximately 75% of export commodity value. The strategy aims to identify the impact of both current weather variability and future climate change on Ethiopia ('challenge'), to highlight options for building climate resilience ('response') and to understand how these options can be delivered ('making it happen').	Ministry of Agriculture and Natural Resources, Ministry of Environment, Forest and Climate Change
Climate Resilience Strategy for Water and	The water and energy sectors have key role in meeting the GTP2 goals. Given their importance, the Climate Resilience Strategy for Water and Energy has three main objectives: to identify the economic and social	Ministry of Water, Irrigation and Electricity,

Regulation	Purpose	Responsible Institutions
Energy	<p>impacts of current climate variability and future climate change on water and energy in Ethiopia; to identify priority ways that the water and energy sectors can build climate resilience and reduce the impact of climate variability and climate change; and to map the necessary steps to finance and implement measures in the water and energy sectors to build climate resilience in Ethiopia and deliver an integrated Climate Resilient Green Economy.</p> <p>The strategy is directly relevant to the REDD+ strategic options particularly to the forest management and biomass energy activities, as it relates to catchment management and reducing deforestation and forest degradation.</p>	Ministry of Environment, Forest and Climate Change

4.2. International Agreements and Conventions

4.2.1. United Nations Convention on Biodiversity (CBD 1996)

United Nations Convention on Biodiversity (CBD 1996) under this convention, Ethiopia has agreed to conduct an Environmental Assessment of proposed development projects to minimize harmful effects. The CBD provides a global legal framework for action on biodiversity. It brings together the Parties in the Conference of the Parties (COP) which is the Convention's governing body.

The COP for the CBD (COP 10) in its Decision X/33 recognized the importance of REDD+ activities in developing countries in collaboration with various stakeholders, including the UN organs and the national focal points for the CBD with the participation of indigenous and local communities, so that actions are consistent with the objectives of the CBD and avoid negative impacts. (Paragraph 9 (g)). It also deals with the assessment of the contribution of REDD+ in achieving the objectives the CBD. (Paragraph 13).

COP 11 which took place from 8 to 19 October 2012 in Hyderabad, India, conducted important negotiations on REDD+. These include:

- Keeping the Convention's implementation under review; adopting indicators on the targets; allocating financial resources for the forest biodiversity work program, rather than focusing on non-binding guidelines for reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+);
- Strengthening REDD+ initiatives, geo-engineering and knowledge on linkages between biodiversity and climate change;
- Focusing on safeguards, considering means of monitoring and assessing the impacts of REDD+ on biodiversity;
- Understanding that the issue of forests is not reduced to REDD+;
- Develop indicators to monitor compliance by developing countries with REDD+ safeguards aimed to prevent negative impacts on biodiversity and indigenous and local communities;

Outlining a “roadmap” authorizing the next CBD COP to consider a progress report on REDD+ safeguards that can hopefully feed into the subsequent climate COP and allow for further review at CBD COP 13;

From these COP decisions and discussions, it can be discerned that the relevance of REDD+ activities in developing countries to achieve the objectives of the CBD has been given due attention. Moreover, the issue of impacts on the biodiversity and the human society, particularly on indigenous peoples and local communities has been repeatedly emphasized.

4.2.2. Convention on International Trade in the Endangered Species of Fauna and Flora (CITES 2004)

CITES Provides an international umbrella for management and control of trade in endangered fauna and flora. It is an agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. CITES is initiated because of the crosses borders nature of the trade in wild animals and plants which necessitates international cooperation to safeguard certain species from over-exploitation. CITES provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level. It has about 180 parties. Ethiopia ratified the convention in 1989.

4.2.3. United Nations Framework Convention on Climate Change (UNFCCC 1995)

The Government of Ethiopia joined the global community to combat climate change by ratifying this Convention. As a developing country (non-Annex I), there is no requirement for Ethiopia to reduce its greenhouse gas emissions. The country also ratified the Kyoto Protocol in 2003 and thus may be eligible for involvement in carbon trading through a compliance market of the Clean Development Mechanism as well as the international voluntary greenhouse gas emission trading.

On 11 December 2010, a number of agreements were reached at the United Nation Framework Convention on Climate Change (UNFCCC) conference in Cancun, Mexico. These agreement cover: mitigation, transparency of actions, technology, finance, capacity building and forests. They provide important guidance for all actor countries, NGOs and multilateral institutions who are helping countries prepare for REDD+.

The Cancun Agreements are a set of significant decisions by the international community to address the long term challenge of climate change collectively and comprehensively over time and to take concrete action now to speed up the global response. They represent key steps forward in capturing plans to reduce greenhouse gas emissions and to help developing nations protect themselves from climate impacts and build their own sustainable futures.

The Parties at Cancun agreed on seven UNFCCC REDD+ safeguards, among them transparency, participation, protection of biodiversity, and protection of the rights of local people (Box7). If implemented correctly, the UNFCCC REDD+ safeguards can help ensure that REDD+ does not inadvertently harm communities and ecosystems. The topic of reducing emissions from deforestation in developing countries was first introduced at the eleventh session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Montreal (December 2005). The Climate Change Conference in Bali, in December 2007, opened the

possibility of developing an incentive mechanism for “reducing emissions from deforestation and forest degradation; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries” (REDD+). Subsequently some REDD+ projects have been developed, which already feature in the voluntary carbon markets.

Box 7

Summary of UNFCCC REDD+ Safeguards

- Require to be in line with objectives of national forest programmes and relevant international conventions and agreements. It does not require any new obligations except reaffirming the existing ratified agreements;
- transparent and effective national forest governance structure;
- Respect for the knowledge and rights of indigenous peoples and members of local communities;
- The full and effective participation of relevant stakeholders, particular indigenous people and local community;
- Conservation of natural forests and biological diversity and enhancement of other social and environmental benefits;
- Actions to address the risks of reversals;
- Actions to reduce the displacement of emissions.

4.3. World Bank Safeguards Policies

The Project has been assigned an EA category B due to the overall low to moderate risk stemming from the REDD+ program. All World Bank Safeguards Policies and their applicability for this project are listed in the table below.

Table 8: World Bank Safeguards Policies and their Applicability

Safeguard Policies	Applicable
Environmental Assessment OP/BP 4.01	Yes
Natural Habitats OP/BP 4.04	Yes
Forests OP/BP 4.36	yes
Pest Management OP/BP 4.09	Yes
Physical Cultural Resources OP/BP 4.11	Yes
Indigenous Peoples OP/BP 4.10	Yes
Consultations and Disclosure requirements BP 17.50	Yes
Involuntary Resettlement OP/BP 4.12	Yes
Safety of Dams OP/BP 4.37	Yes
Projects on International Waterways OP/BP 7.50	No
Projects in Disputed Areas OP/BP 7.60	No

Table 9: World Bank Safeguards Policies and their Application

Safeguard policies	Description and applicability
OP/BP 4.01: Environmental Assessment	<p>Environmental Assessment is used to identify, avoid, and mitigate the potential negative environmental impacts associated with activities implemented on the ground.</p> <p>The EA is a process whose span, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed strategic interventions to reduce deforestation and forest degradation under REDD+ Scheme. The EA process takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, local community/ Underserved community and indigenous knowledge).</p> <p>The environmental and social impacts of the REDD+ Program will come from the proposed strategic options to reduce deforestation and forest degradation. Thus, in order to reduce the risks coming from the implementation of the REDD+ strategic options and the investment of Oromia OFLP and other regional REDD+ pilot initiatives require safeguard instrument to be in place before bank appraisal of the project, in line with this the EA process calls for the Government of Ethiopia to prepare an Environmental and Social Management Framework (ESMF).</p> <p>This ESMF report will establish a management framework for the identified</p>

Safeguard policies	Description and applicability
	<p>potential risks, opportunities and proposed preliminary mitigation measures in the SESA document. It also set out monitoring and institutional measures to be taken during operations of these activities, to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The Policy requires to disclose the ESMF report for the public through different accessible media including the world Bank Info shop.</p> <p>As part of the ESMF process, proposed strategic options and targeted interventions under the REDD+ program is to be planned at the local level and required to comply with the requirements set out under World Bank safeguard policies.</p> <p>The World Bank system assigns a project to one of the three project categories, as defined below:</p> <p>For Category "A" Projects EIA is mandatory. For such projects, impacts are expected to be 'adverse, sensitive, irreversible and diverse with attributes such as pollutant discharges large enough to cause degradation of air, water, or soil; large-scale physical disturbance of the site or surroundings; extraction, consumption or conversion of substantial amounts of forests and other natural resources; measurable modification of hydrological cycles; use of hazardous materials in more than incidental quantities; and involuntary displacement of people and other significant social disturbances. <i>However, as the National REDD+ Program is a Category B project, it should be noted that any REDD+ interventions/project activities that would be categorized as category 'A' will not be funded and implemented under the REDD+ Program.</i></p> <p>Category B projects have impacts that are 'less significant, not as sensitive, numerous, major or diverse. Few, if any, impacts are irreversible, and remedial measures can be more easily designed. Typical projects include rehabilitation, maintenance, or upgrades, rather than new construction.</p> <p>Category "C" Projects: Apart from screening, no EIA or other analysis is required. Category C projects result in negligible or minimal direct disturbance of the physical environment. Typical projects include education, family planning, health, and human resource development.</p> <p>The proposed investment activities related to each strategic options of REDD+ will not likely to create high adverse impact since most of the investment activities are majorly implemented to rehabilitate the environmental problems specially related to forest conservation and integrated sustainable management (PFM, agroforestry, re-forestation and others as it is mentioned on fig. 3). Thus, REDD+ Program is categorized as B and the REDD+ investment activities will most likely not require a full scale ESIA. However, environmental and social analysis is necessary, and appropriate safeguards instrument(s) has/have to be prepared to</p>

Safeguard policies	Description and applicability
	<p>prevent, minimize, mitigate or compensate for adverse impacts and maximize beneficial impacts on a sustainable basis. The ESMF was therefore prepared since the nature and scope of proposals as well as locations could not be identified during project preparation. When the specific location and the actual nature and scope of the proposal is known, the relevant safeguards instruments for each component will be determined using screening criteria mentioned in Chapter 6 and Annex 5.</p>
<p>OP/BP 4.04: Natural Habitats</p>	<p>The general objective of this operational policy is look for to ensure that all activities proposed in the National REDD+ Strategy should take into account the conservation of biodiversity, as well as the numerous environmental services and products, which natural habitats provide to human society. It also stringently restricts the circumstances under which any project can impact natural habitats (land and water areas where most of the native plant and animal species are still present).</p> <p>REDD+ program activities are predicted to have significant positive impacts on natural habitats, as the country puts in place an effective strategy to reduce deforestation and conserve the existing natural forests. Issues related to natural habitats and potential impacts from the National REDD+ Strategy assessed in SESA.</p> <p>By and in large the envisaged REDD+ Program in Ethiopia does not have potential threat on natural habitat, however, there are some impacts on fragmented and degraded forest habitat areas while executing rehabilitation through afforestation/reforestation. Thus, Natural Habitat issues will be addressed as part of the environmental assessment.</p>
<p>OP/BP 4.36: Forests</p>	<p>REDD+ activities in forest lands aim to reduce deforestation, enhance the environmental services contribution of forested areas, promote reforestation, reduce poverty, and encourage economic development. Overall, the REDD+ activities are expected to have significant positive impacts on forest, in that the main goal of the program is to reduce deforestation, while contributing to the wellbeing of forest dependent communities whom will be consulted during the course of the project. Critical issues related to Forest and potential impacts from the National REDD+ implementation were assessed through SESA and potential negative impact addressed in the ESMF.</p>
<p>OP 4.09: Pest Management</p>	<p>The Bank encourages the use of various means to assess pest management in the country and support Integrated Pest Management (IPM) and the safe use of agricultural pesticides. In World Bank-financed agriculture operations, pest populations are normally controlled through IPM approaches, such as biological control, cultural practices, and the development and use of crop varieties that are resistant or tolerant to the pest.</p> <p>The REDD+ Program triggered OP/BP 4.09 because pesticides are being used by</p>

Safeguard policies	Description and applicability
	<p>forest dependent and surrounding communities in the forested areas of the Program and they may increase the use of agrochemicals (such as insecticides and herbicides). Thus, an integrated pest management plan needs to be prepared as indicated in the guideline in Annex 19.</p>
<p>OP/BP 4.11: Physical Cultural Resources</p>	<p>The objective of this policy is to assist countries to avoid or mitigate adverse impacts of development projects on physical cultural resources. For purposes of this policy, “physical cultural resources” are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater.</p> <p>This policy is triggered since one of the strategic option proposed to rehabilitate degraded land is area closure. This planned activity may interfere and restrict access to cultural and sacred sites found within the forest area. Conservation of natural forest to enhance the carbon stock may also create restriction of free access to diverse forest product this may led to affect elders transferring of indigenous knowledge (ethno-botanic) to young people. Thus, consultations and participating elders, women's, cultural or religious leaders, local authorities required to be conducted before decision on sub-project implementation is made. Sub-projects will be screened for their impacts on physical cultural resources and mitigation measures to avoid impacts on physical cultural resources have been suggested.</p>
<p>OP/BP 4.10: Indigenous Peoples</p>	<p>Ethiopian government recognizes that all people in Ethiopia are indigenous and there are only underserved communities. REDD+ triggers this operational policy since the program implementation conducted in sites where local community (in bank terms "indigenous people") are living. The World Bank ensures that any project financed by it is not against the underserved peoples’ dignity, rights, economic benefit and cultural practices. The Bank further wants to ensure that there is free, prior and informed consultation with the underserved people before endorsing the project, as captured in the consultation and participation summary of the SESA. In addition, please see below for further information.</p> <p>Despite the non-recognition of local communities “Indigenous People (in bank terms) defined under international law, in Ethiopian legislation, significant opportunities do exist for the protection of these peoples within existing legal frameworks in the country. These Constitutional, statutory provisions, and international instruments ratified by Ethiopia like Convention on Biodiversity are of particular importance to indigenous peoples. The Constitution, for instance, requires consultation of communities over development activities affecting them. Accordingly, consultations on the possible impacts of REDD+ interventions,</p>

Safeguard policies	Description and applicability
	<p>including resettlement and relevant mitigation measures, have been held among stakeholders at federal, regional, Woredas and Kebele/community levels. The sample sites were selected in consultation with all relevant stakeholders by using the following criteria: (I) Hot spots for deforestation and forest degradation (identified by drivers of deforestation and forest degradation study and other REDD+ pilot sites), (ii) REDD+ projects implementation potential (Lands that have forest and/or could support forest growth and have potential for the implementation of REDD+), (iii) Leakage (Forest lands found adjacent to areas where REDD+ project is implemented. This may make the forest prone for leakage. Leakage create environmental risk in terms of forest degradation and biodiversity loss); (iv) forest types (diversity); (v) Socio-economic settings (Communities that in one way or the other depend on the forest for their economy, cultural value and spiritual value. The segment of the communities includes pastoralists, agro-pastoralists and sedentary agricultural community with their respective diversity with regards to ethnicity, cultural practice with regard to forest institutional setup working on forest (CBOs and religious institutes). Community member who are underserved, vulnerable groups (Women, elders, disabled) and youth were consulted. Further, regional administration (national regional states of the country having a potential for the REDD+ project implementation) and plantation sites (to see impacts of afforestation/reforestation) were used as selection criteria.</p> <p>Based on the above mentioned criteria, community members selected from eight regions, twenty-six woredas and fifty-two Kebeles were consulted during the development of the REDD+ safeguards instruments. See Annex 2 for detailed information on the results of the consultations held at different administrative levels, including their environmental and social concerns, along with potential mitigation measures to address identified impacts. See Annex 3 for the list of consulted stakeholders, including local communities.</p>
<p>OP 4.12: Involuntary Resettlement</p>	<p>Involuntary Resettlement Operational Policy covers physical relocation, loss of shelter, loss of access to resources or assets and loss of income sources or means of livelihood. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts.</p> <p>REDD+ activities such as area closure, afforestation/re-afforestation can limit access to forests and forest products, and grazing. Moreover, if protected areas such as parks, biosphere reserves (in core areas), and in situ biodiversity conservation sites are considered as part of REDD+ program, it triggers this policy since they have involuntary restrictions to local populations. Thus, OP/BP. 4.12 is triggered; and in SESA document all issues related to involuntary resettlement were identified. A Separate RPF and PF was prepared to guide implementation of mitigation measures related to resource access restriction in forest area and or protected areas (parks, biosphere reserves and others) respectively. It is</p>

Safeguard policies	Description and applicability
	implemented accordingly prior to commencement of the targeted intervention activities.
BP 17.50: Consultations and Disclosure requirements	<p>Whenever the Bank requires an environmental assessment (EA) and/or a Resettlement Instrument (RI), the proposed borrower prepares an EA report and/or a RI report as a separate, freestanding document, publicly available to project-affected groups and local NGOs.</p> <p>The REDD+ project activities need to disclose information for the public. Based on this fact, information disclosure and community participation tools have been developed (REDD+ Consultation and Participation plan (Oromia and Federal), REDD+ Grievance redress mechanism, REDD+ Communication strategy).</p> <p>Thus, these tools are important to disclose information related to safeguards and other REDD+ implementation activities during readiness, design and implementation phase.</p>
OP 4.37: Safety of Dams	<p>As the REDD+ strategic options include establishment of small dams for improving agricultural production and reducing extensive agriculture, which increases deforestation, there will possibly be construction of small dams (less than 4.5 meters high), particularly for irrigation. Under the World Bank's OP 4.37 definition, small dams constitute those dams having a height of less than 15 meters. <i>For small dams, generic dam safety measures designed by qualified engineers are usually adequate.</i> Based on experience in Ethiopia, a dam less than 4.5-meter-high is considered as a small dam. Therefore, for the construction and operation of small dams, relevant guidelines will be used to protect people, property and the environment from harmful impacts and risks. Thus, OP 4.37 is triggered. The REDD+ Program, will therefore use the FAO 'Manual on Small Earth Dams, a guide to siting, design and construction' as a good practice. In addition, the guideline for small dam construction prepared by the Ministry of Agriculture will be used to ensure safety of small dams; and the guideline is attached in Annex 20.</p> <p>Moreover, it needs to be noted that REDD+ is working mainly to reduce deforestation and forest degradation by implementing environmentally friendly strategic options such as forest management, afforestation/ reforestation, and area enclosures which lead to reduction of siltation of rivers and streams in the forested landscapes of the country. Thus, none of the proposed strategic options will adversely change the quality or quantity of water flows to international waterways. In addition, the REDD+ Program will not finance and implement any REDD+ interventions which will have adverse impacts on international water ways. Therefore, OP/BP 7.50 is not triggered, as the strategic options under the REDD+ Program are unlikely to affect the overall hydrological balance of any of the international waterways or their tributaries.</p>

5. Social and Environmental Impacts of REDD+ Strategic Options

The ESMF is to ensure that the implementation of the REDD+ program will be carried out in an environmentally and socially sustainable manner. It also provides a framework to enable communities screen projects and institutional measures to address adverse environmental and social impacts.

This ESMF is intended to be used as a practical tool during program implementation. It explicitly describes the environmental and social steps to be undertaken in the implementation of the planned projects and activities under REDD+ program.

5.1 Positive Social and Environmental Impacts of REDD+ Strategic Options

Generally, the REDD+ program is expected to have positive impacts on the local environment, in the short, medium and long terms. Some of the positive impacts that will be envisaged as a result of the implementation of the REDD+ program is described below:

Table 10: Positive Social and Environmental Impacts of REDD+ Strategic Options

Proposed Strategic options	Social Benefits	Environmental Benefits
SO1: Enhance cross-sectoral synergies and stakeholder participation-	<ul style="list-style-type: none"> •Creates coherent vision that outlines a path towards sustainable forest management •Policy will be harmonized and key stakeholders will participate on implementation of the harmonized sectoral policy, •creates legal framework among key stakeholder to reduce deforestation •Prevents effort duplications • Avoids resource wastage •Assigns accountability to one institute/organization 	<ul style="list-style-type: none"> • Help for sustainable reduction of deforestation and forest degradation • reduce fragile ecosystem degradation due to large scale agricultural investment, mining, and infrastructure development
SO2: Forest governance and law enforcement	<ul style="list-style-type: none"> • Enhance forest ecosystem service to the local community, regional and global • increase the contribution of forestry to the total GDP • enable the local community to have detailed knowledge of the forest resource in their vicinity • Increase Forestry's contribution to 	<ul style="list-style-type: none"> • ensure the continuous recruitment of potential crop trees by protecting browsing & grazing in the existing forest • put restriction on expansion of farm land into forest • Enhance carbon sequestration/ maintain

Proposed Strategic options	Social Benefits	Environmental Benefits
	employment generation in Ethiopia • help hydro power and irrigation dams not to be silted and make them sustainable	carbon stock • Improve forest fire management • Increase contributions of forests to watershed management, soil and water conservation and forest products utilized in other economic sectors such as health, food, and manufacturing and construction activities • Encourage biodiversity Conservation
SO3: Forest tenure and property right	• Improve incentives or abilities to invest in forest sector • help community to use their labor, wealth, and creativity in forest management • help underserved community to access forest resource benefits	• Enhance natural resource conservation and local community involvement on reduction of deforestation and forest degradation
SO4: Land use planning	• increase productivity of agricultural land • reduce conflict between different key actors on land resource	• Help reduction of deforestation due to conversion of forest land into other land use. • make sustainable and long-term land improvement and management practices
SO5: Ensure Sustainable Forest Management	• Create partnership between government and community • create access and benefit from forest resource for local community • help to respect rights, Change attitudes/ changing roles, • help to address resource use conflicts, Democratic functioning • Enhance participation of local community in forest management	• Enhance sustainable forest development, • Create sustainable forest use • Help to create healthy regeneration, Forest boundary respected, Enrichment plantings, Open access regulated, Re-appearance of wildlife, Forest fire incidence

Proposed Strategic options	Social Benefits	Environmental Benefits
	<ul style="list-style-type: none"> • Strengthen the existing traditional community based natural resource management institutions such as the Gada system of Oromo pastoralist • Help to engage the forest dependent community to participate in Forest Resource Assessment, • enable the local community to have detailed knowledge of the forest resource in their vicinity • Help to sustain the flow of benefits which are to be fairly shared primarily between the communities and the state forest agency • sustain and/or increase income opportunities from improved natural resource management and diversified livelihood 	<p>minimized</p> <ul style="list-style-type: none"> • Help establishment of forest monitoring system • Create partnership between state forestry service and organized villagers • all silvicultural treatments could take place with low financial input • Improve biodiversity and forest quality, • Enhancement of ecosystems services (water availability and other erosion control) in a sustainable manner • Reduce deforestation and forest degradation,
<p>SO6: Enhancement of forest carbon stock</p>	<ul style="list-style-type: none"> • Increased income and savings • Increased knowledge and experience related to agroforestry • Improved food security and nutritional status • Help diversification of income • Increased firewood supply • Increased income and savings • enhance ecosystem service for local community • forest product provision for local community enhanced • communities access a number of non-timber forest products for household needs like grass • Increasing local economic opportunities including where possible jobs for people from local communities and deliberate use of local services. 	<ul style="list-style-type: none"> • Improved soil fertility and yields • Reduce pressure on forest resource for fuel wood • soil conservation, erosion control and water conservation • trees planted in agricultural land will help as wind breaks • It helps to hold soil in place during and after harvest of farm crops. This allows for ground moisture levels to remain regular, reduces soil degradation and erosion. • ensure the continuous recruitment of potential crop trees by protecting browsing & grazing in the existing forest

Proposed Strategic options	Social Benefits	Environmental Benefits
	<ul style="list-style-type: none"> • The fall in prices of forest products such as firewood and charcoal • Supply for forestry products of lignum and fodder will increase • reduce time and energy required to access forest product • improve human settlements and life quality 	<ul style="list-style-type: none"> • Encourage regeneration of flora diversity • Enhance biodiversity Conservation • Enhance carbon stock in the forest area • Help maintenance of landscapes and scenic views • Contribute reduced deforestation, forest degradation and carbon emissions • Natural and ecological forest will be protected from destroying available, and the ecological environment will be improved and protected indirectly. • Increase the capacity of water conservation, • Increase habitat of wildlife, form the biological corridor, be in favour of biodiversity protection. • Improvement in ecosystem services • Increase forest resource coverage
<p>SO7: Agricultural intensification-</p>	<ul style="list-style-type: none"> • reduce poverty which led forest extraction for sale • Enhance income of the community • Create job opportunity • Improved household food security and diet • Livelihood of the local community will be enhanced 	<ul style="list-style-type: none"> • enhanced land & crop management • Enhance conservation of agro-biodiversity • reduce expansion of agriculture into forest land • improve agricultural practices • Productivity of small scale

Proposed Strategic options	Social Benefits	Environmental Benefits
	<ul style="list-style-type: none"> • Create job opportunity • reduce expansion of agriculture • improve agricultural practice • increase income • diversify crop production and nutrition 	<p>agriculture will be enhanced</p> <ul style="list-style-type: none"> • Reduce Expansion of small scale agriculture in to forest area • Agricultural practices will be improved • Increase crop diversification • Reduce forest degradation pressure on forest
<p>SO8: Reduce demand for fuel wood and charcoal-</p>	<ul style="list-style-type: none"> • saves time when collecting wood, • saves money, • Create additional income for small and micro enterprise stove producers • reduce health impact of smoke from three stone open fire stoves • Reduction of child labour for fuel collection • Reduce fuel expenditure • reduce to exposure of indoor air pollutants (IAP) such as carbon monoxide and particulate matters which affect women and children 	<ul style="list-style-type: none"> • Provide alternative energy • Reducing emissions of carbon monoxide by more efficient burning • Reduce loss of forests and thus increased potential for biodiversity conservation and maintenance of ecosystems services • Reduce in environmental pollution Conserve the forest
<p>SO9: Increase wood and charcoal supply</p>	<ul style="list-style-type: none"> • Drive of economic development • Encourages the creation of wood industries • create multiplier effects on the local economy through creation of employment opportunities at each value chain levels • improve household income and socio-economic well-being of farmers • Encourages the creation of wood product • Improves wood self sufficiency • source of supplementary income or as women's work • reduce migration from rural or forested areas and improve people's incomes • charcoal makers would produce charcoal 	<ul style="list-style-type: none"> • More carbon sequestration • Micro-climate improves • Recurrent drought experienced by the country halt • Reduce non-sustainable and high rates of wood fuel extraction that destroy forests and woodlands and the environmental services these provide including soil and water conservation • decreases deforestation and forest degradation on other forests (such as high forest)

Proposed Strategic options	Social Benefits	Environmental Benefits
	<p>as their main activity</p> <ul style="list-style-type: none"> • Increase foreign income, • create job opportunity for youth and landless people • reduce impact of invasive species on range land and farm land 	<ul style="list-style-type: none"> • increase on farm species diversity • enhance soil fertility • avoid deforestation by overharvesting of charcoal production • help to conserve resources, • Reduce fuel wood consumption and then reduction of CO2 emissions from biomass • reduce impact on endangered species since it will be done on invasive species like <i>Prosopis Juliflora</i>
<p>SO10: Improved livestock management-</p>	<ul style="list-style-type: none"> • Effective, market-oriented livestock production increase output quantity, quality and prices • Identify opportunities for the poor, especially women, to participate in value added production of livestock and livestock products, thereby capturing a greater share of additional value within the livestock production and marketing chain • Improve livestock sector infrastructure and provide greater incentives for market participation and productivity • increase income of the local community, • create job opportunity for landless community members • reduce farmer's economic loss • Increase productivity of livestock • secure sustainable household income • increase animal protein supplies to match 	<ul style="list-style-type: none"> • change impact of large crowd of livestock on regeneration or recruitment of seedlings by reduce number of livestock • reduce pressure on the available resources • reduce poor range management involving overgrazing practices that increase soil erosion and increase amount of poor pasture and invasive plant species on the natural pasture • reduce loss of livestock genetic resources • Significantly reduce emissions from domestic animals. • reducing the pressure on fragile ecosystems

Proposed Strategic options	Social Benefits	Environmental Benefits
	<p>human needs</p> <ul style="list-style-type: none"> • Since its initial investment cost is small, it involves young, women and other community in poultry production •Mechanization leads to food self sufficiency •improve livelihoods of smallholder farming communities 	<ul style="list-style-type: none"> • reduce pressure on natural resource by keeping animal draft for ploughing
<p>SO11: Promote supplementary income generation</p>	<ul style="list-style-type: none"> • substantial contributions to the security of food and nutrition in drought periods, and main foods and supplementary diets in normal times • contribute towards food security, improving health and nutrition, medicinal treatment, income generation, cultural heritage • safeguard non-timber Forest resources and user rights • communities will be able to sustain and improve their livelihoods without the destruction of the NTFP resources, water Sources or ecosystems. • Improve product supply, value chain dynamics and marketing. Communities will experience increased food security and household income, enabling them to invest in diversification, education, healthcare and better living conditions. • When crops and livestock are insufficient, NTFP become essential for food and income. • The national foreign expenditure for importing wood products will substantially decrease, and this will increase the national income • The existing huge gap between demand and supply of forest products will be 	<ul style="list-style-type: none"> • improve the value of source of NTFP, thus reducing the risk of deforestation while still obtaining sustainable benefits from these forest for the local communities • Enhance sustainable management and use of NTFP source of trees, • substantial amounts of carbon will be stored both in the above ground and below ground biomass • Increase substantial amount of carbon stock sequestration, • forest resources will be sustainably managed • Soil erosions will be substantially reduced • reduce pressure on natural forest • plantation forests will serve as a buffer zone of natural high forests and woodlands • Regular forest resource monitoring system will be established • reduce pressure on natural

Proposed Strategic options	Social Benefits	Environmental Benefits
	<p>minimized</p> <ul style="list-style-type: none"> • poor people would have increased adaptive capacity to climate shocks by increasing their house hold income from direct selling of forest products • create job opportunity for underserved community, • Enhance household income • diversify nutrition of the community • increase contribution of the forest resource for the national GDP, • increase involvement of different stakeholders in the value chain process 	<p>forest</p> <ul style="list-style-type: none"> • reduce illegal logging on natural forest • help for sustainable management of the forest
SO12: Capacity building	<ul style="list-style-type: none"> • incentivize stakeholders to forest resource management and involvement of different stakeholders • Strengthen government and community in management and introducing forest and other related livelihood alternatives • increase capacity to tackle technical issues related to forest resource • share experience and help to scale up best experience f forest management 	<ul style="list-style-type: none"> • strengthen conservation and rehabilitation of forest resources in a sustainable manner • help to establish strong forest administration system capable of arresting the rapidly increasing rate of deforestation as well as controlling and preventing the disruption of the various ecosystems • forest management knowledge will be created
SO13: Inter-sectoral coordination on planning and implementation-	<ul style="list-style-type: none"> • reduce conflict among stakeholders working on land resources • harmonize policy conflict • create linkages with different stakeholders 	<ul style="list-style-type: none"> • strengthen sustainable forest rehabilitation
SO14: Demand-driven Research and extension linkage	<ul style="list-style-type: none"> • encourage private sector to involve and invest in the sector • policy makers give proper attention for forest sector • create knowledge to be shared scale up for 	<ul style="list-style-type: none"> • enhance forest cover and conservation of the existing forest resources • help to enhance government budget for forest governance and establishment of better

Proposed Strategic options	Social Benefits	Environmental Benefits
	<p>the sustainable benefits of the community</p> <ul style="list-style-type: none"> • establish data base system on forest resources • analyze gaps and provide solution for social problems 	<p>intuitional set up for the sector</p> <ul style="list-style-type: none"> • help promoting technologies of forest management, renewable energy and agroforestry to meet the needs and sustainable implementation of REDD+ • help sustainable afforestation and restoration of forest resources
<p>SO15: Ensure full participation and equitable benefit for women</p>	<ul style="list-style-type: none"> • women participation in forest use and management will be enhanced • Women’s concerns of tree planting will be addressed • Improve security of tenure for women through promoting the issuance of land use right certificate. • it has the potential to positively affect women’s roles and status in relation to land ownership and management • Women’s knowledge of landscapes and ecosystems can help REDD+ projects succeed • women’s inclusion exhibits the likelihood to improve forest conditions • Women’s inclusion in REDD+ is itself a crucial safeguard issue that warrants immediate attention • Help to compensate women equitably for their engagement in forest protection and carbon monitoring activities. • Women organizations may get information in all phases of REDD+ Implementation • Women can play an essential role in forest monitoring • enhance women involvement in and 	<ul style="list-style-type: none"> • help sustainable conservation of forest resources • help sustainable conservation of forest resources

<i>Proposed Strategic options</i>	<i>Social Benefits</i>	<i>Environmental Benefits</i>
	influence over decision-making processes that define their access to forest rights and resources, and rights to assets, including land and other property	
SO16: Benefit sharing	<ul style="list-style-type: none"> • Help to organize community groups and regional government/forest services share the benefits, • ensure poor and marginalized groups have equal chance to participate • Create relevant stakeholder and local community ownership to the forest • Increase off-farm income generating activities for communities living adjacent to protected areas • Membership developed bylaw clearly specifies duties and responsibilities of the CBO members. This enable to resolve their problem themselves 	<ul style="list-style-type: none"> • enhance conservation and rehabilitation of forest resources • enhance participatory conservation of forest resources • ensure the participation of communities in forest protection and conservation • help conservation of the forest resources by the forest local community

5.2 Adverse Social and Environmental Impacts of REDD+ Strategic Options and their Mitigation Measures

The mitigation measures for the adverse social and environmental impacts of REDD+ Strategic Options are shown in Table 11 below.

Table 11: mitigation measures for the adverse social and environmental impacts of REDD+ Strategic Options

<i>Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures*</i>	<i>Risks</i>	<i>Mitigation measures**</i>
SO1: Enhance cross-sectorial synergies and stakeholder participation-	<ul style="list-style-type: none"> • Increased deforestation and forest degradation due to absence of full collaboration of sectoral institutes with MEFCC (e.g. law enforcement weakness) • Less likely collaboration of sectoral institutes for joint planning on forest issues 	<ul style="list-style-type: none"> • Coordination unit to be established in relevant Ministry Offices that check synergy of the sectoral institutes • Assign counterpart (focal person) in each sectoral office that links MEFCC with them 	<ul style="list-style-type: none"> • Inefficient social service from the sectoral office due to absence or little synergy (E.g., Licensing in forestry investment and pass permit for forest products overlaps in the mandates of the Bureau of Agriculture and the Forest Enterprises in the regions) 	<ul style="list-style-type: none"> • Enhance synergy • Develop customer reporting system for stakeholders from government offices, private sector, NGOs, CBOs, etc. at federal, regional, zonal, woreda and kebele levels
SO2: Forest governance and law enforcement-	<ul style="list-style-type: none"> • May bring increased forest degradation from organized illegal cuttings • May call for total environmental destruction from mass mobilized cuttings and setting of forest fire 	<ul style="list-style-type: none"> • Avail forest products and non-timber forest products which the community depends on the forest from other sources • Share benefit to the community from the income accrued due to the protection of forest • Increase the awareness of the community through 	<ul style="list-style-type: none"> • Restriction over livestock pasture resource may impact livelihoods • Restriction over expansion of farmlands may reduce productivity • Restriction over fuel, construction and farm tools may impact on incomes • Conflict between local communities and 	<ul style="list-style-type: none"> • Let the community use grass in cut and carry system • Intensify productivity per unit area through improved input use so that areal expansion of agriculture land halt • Supply improved cooking and baking stoves to the community which depends on forest for energy source • Materialize the second phase

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
		training and education <ul style="list-style-type: none"> • Law enforcement should be in place • Allow community use the resource without cutting the trees e.g. for ritual, cultural practices, • Educate and train the community on the value of the forest • Prepare enough through capacity building (human & material) to suppress fire incase fire is set • Empower indigenous grievance redress mechanisms 	protecting agents <ul style="list-style-type: none"> • Restriction over member of communities that traditionally use the forest for religious rituals • Obstruction of routes that connect communities living on either sides of the forest • Hosts wild animals that may frequently attack livestock of surrounding communities • Strong institutions may override community based institutes that protected forest for centuries 	growth and transformation plan (GTP) of Ethiopia that gives due emphasize to renewable energy sources <ul style="list-style-type: none"> • Shift from wood to metal and/or blocks for construction • Ploughing system shift from traditional to low or no tillage • Use customary conflict redress mechanism • Enhance the benefit of the community from the enclosed area • Compensate them enough • Allow communities to practice the ritual and religious practices in the forest as far as these do not affect the forest • Area enclosure should leave access routes for communities to move freely • If obstruction of access route is must, another reasonably convenient route must be

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
				arranged <ul style="list-style-type: none"> • Maintain wildlife numbers to manageable size • Compensate individuals who lost livestock to wildlife attack • Strengthen and empower CBOs as to be more critical and accountable
SO3: Forest tenure and property right	<ul style="list-style-type: none"> • Attractive forest tenure and property right may increase land grabbing opportunity • May increase the value of forest land over agriculture land • Disrupts traditional tenure and forest management systems • Change in land use type may be induced (e.g. from agriculture to forest or vice versa) 	<ul style="list-style-type: none"> • Implement effective law enforcement to deter land grabbing • Government should implement land use planning • Synchronize traditional and modern land use system get the best out of the combination • Compensation planting required if change is from forest to agricultural lands 	<ul style="list-style-type: none"> • Small holder farmers may be evicted from their holdings for forest investment • Loss in land ownership may be induced (e.g. from private to government or vice versa) • Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest 	<ul style="list-style-type: none"> • Organize community in CBO/PFM and let them have their own forest • Adequate compensation in kind and other means by the government based on the legal framework and the RPF
SO4: Land use planning	<ul style="list-style-type: none"> • Change in land use type may be induced (e.g. from agriculture to forest or vice versa) 	<ul style="list-style-type: none"> • Compensation planting required if change is from forest to agricultural lands 	<ul style="list-style-type: none"> • Loss in land ownership may be induced (e.g. from private to government or vice versa) 	<ul style="list-style-type: none"> • Adequate compensation in kind and other means by the government based on the legal framework and the RPF

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
			versa) <ul style="list-style-type: none"> Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest 	
<p>SO5: Ensure Sustainable Forest Management</p> <ul style="list-style-type: none"> Protected forests and Participatory Forest Management PFM operations 	<ul style="list-style-type: none"> Closing high forests for rehabilitation may lead to increased deforestation due to access restriction Create economically driven forest mismanagement that may lead to forest degradation May instigate deforestation from marginalized local communities and/or little benefiting PFM members Low economic value forests in lowland areas may not attract PFM organization Coffee farming in the forest has already degraded biodiversity and further permit of 	<ul style="list-style-type: none"> Allow controlled access into forest rehabilitation areas for NTFP collection Hybrid of PFM and Traditional forest management with scientific management so that forests utilized based on forest management plan PFM should encompass all community members with equal benefit sharing Enhance the economic value of the lowland forests through forest industry installation Strict control over the expansion of coffee planting in the forest Put in place where the undergrowth and natural 	<ul style="list-style-type: none"> Complete closure deprives the poor of livelihoods generated from NTFPs Interventions of PFM are prone for any physical damage since it does not have legal support under Ethiopian law PFM experiences in Ethiopia is mainly in a high forest; this may have negative impact to adapt in low land woodland areas where there are different socio-economic and ecological conditions Creates dependency syndrome on local communities because of long term incentivization by implementing projects 	<ul style="list-style-type: none"> Provide controlled access to rehabilitated areas PFM needs to be supported by legal framework by promulgating new policy Educate and train communities in the lowland areas about PFM Assist communities in the low land areas to carry-out experience sharing visit in high land areas Encourage self-dependency of the PFM groups through enabling them generate their own income from the forest management activities As long as possible, no community member should be left out from the PFM The PFM bylaw and the legal framework should define the

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
	<p>coffee farming in the forest may worsen the condition</p> <ul style="list-style-type: none"> Stakeholder and community may not be mobilized as required Tragedy of the commons 	<p>regeneration of tree species allowed to grow</p> <ul style="list-style-type: none"> Put in place maintenance of minimum number of indigenous tree species where coffee is farmed Build own capacity of fire prevention system Educate people Select appropriate species for the purpose 	<p>to protect the resource</p> <ul style="list-style-type: none"> Conflict over benefit sharing and marginalization of certain segments of local community Conflict over skewed power relationship PFM may involve the exclusion of previous forest users from accessing forest resources 	<p>power of the PFM leaders</p> <ul style="list-style-type: none"> The leader should be sued in case of default Fairly allocate access rights to the members of the community The PFM bylaw (either to be (i) strengthened where it exists or (ii) developed in new PFM sites by potential projects) should ensure access to all community members
<p>SO6: Enhancement of forest carbon stock</p> <ul style="list-style-type: none"> Assisted natural regeneration with enrichment planting (high forest + woodland) 	<ul style="list-style-type: none"> Aggravate environmental degradation from setting of fires Aggravate illegal cuttings and destruction of regenerating biodiversity Increase conflict between wildlife & humans & increase crop pests (birds, mammals) Risk of monoculture plantation Compromise to local biodiversity 	<ul style="list-style-type: none"> Educate and enhance the awareness of community Fence to exclude encroachment Do not come close to the habitat/breeding place of wildlife Share benefit from the wildlife hunting/ ecotourism so that community feels ownership over the resource Use integrated crop pest 	<ul style="list-style-type: none"> Physical relocation of local communities Restriction over livestock pasture resource Restriction over expansion of farmlands Conflict between local communities and protecting agents Obstruction of routes that use to connect communities living on either sides of area closure 	<ul style="list-style-type: none"> The household should manage the size of the land that can be managed by the family members Use mechanized/ improved technology for time and energy efficiency reason Adequate compensation in kind or other means by government based on the legal framework and the RPF Use cut and carry system Proportionate the number of livestock with the available

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<ul style="list-style-type: none"> Commercial timber plantation (high forest zone) 	<ul style="list-style-type: none"> Risk of harbor of crop pests in reforested area Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor Poorly designed and mass mobilized conservation measures aggravate soil erosion 	<p>management practice</p> <ul style="list-style-type: none"> Plant mixed species Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation Plant local/indigenous tree species Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation Use integrated crop pest management practice Allow undergrowth through wider space planting Install soil and water conservation practice (physical & biological) to harness erosion Implement conservation measures using experts/well trained person only 	<ul style="list-style-type: none"> High costs of seedling production to carry out plantation relative to enrichment plantings Brings loss of economic benefits Create access restriction for resource utilizations Create land computation with local community Can prevent human and livestock mobility From previous experience of large scale plantation people feel fear of loss of land ownership Fire is a concerns that fire will increase and could affect neighboring properties Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor. 	<p>resource amount</p> <ul style="list-style-type: none"> Intensify productivity per unit area through improved input use so that areal expansion of agriculture land halt Use customary conflict redress mechanism Enhance the benefit of the community from the enclosed area Compensate them enough Area enclosure should leave access routes for communities to move freely If obstruction of access route is must, another reasonably convenient route must be arranged Subsidize the seedling production cost through support by NGOs operating in the area collect seed from local sources and raise them in community owned nursery Compensate for what the

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
		<ul style="list-style-type: none"> • Enforce land use plan to come into force 		<p>community will lose from the land that to be devoted to reforestation/ afforestation</p> <ul style="list-style-type: none"> • Ensure benefit sharing from the reforestation/ afforestation through their active involvement in the activities • Allow cut and carry practice for the grass use • Allow the utilization of NTFP • Implement reforestation/ afforestation on land with no competing interest (e.g. previously forested land or marginalized land) with the community • reforestation/ afforestation should leave access routes for communities to move freely • If obstruction of access route is must, another reasonably convenient route must be arranged • Legal confirm them the forest to be developed on their own land finally belongs to them

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
				<ul style="list-style-type: none"> • Do not plant fire prone tree species • Plant mixed species to minimize the risk of fire setting naturally or deliberately • Train the community on forest fire risk and forest fire management • Construction fire break line between the forest and the properties of the community • Get prepared suppressing the fires through availing fires suppressing tools and equipment • Plant with wider spacing to allow undergrowth so that erosion will be prevented or minimal • Empower women and youth to play the role
<p>SO7: Agricultural intensification-</p> <p>Lower emitting</p>	<ul style="list-style-type: none"> • Quarantined agroforestry species may become invasive and damage the natural environment • May be less effective in cases where mono 	<ul style="list-style-type: none"> • Establish strong quarantine centers at national and all regional government levels • Integrate several crops and tree species in the 	<ul style="list-style-type: none"> • Highly fragment land use types of an individual household and may end up in highly reduced products • Difficult to introduce due 	<ul style="list-style-type: none"> • Increase productivity per unit area through improved input use (seed, fertilizer, etc.). • Integrate several types of agroforestry crops and trees to get increased products

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
techniques for agriculture • Agro-forestry • Nitrogen Management • Soil carbon storage and	culture practice more benefits the environment (e.g. in dissected landscapes) • Where the tree and crop or livestock components overlap in their use of resources, competition may lead to reduced productivity (e.g. Competition for water between tree and crop components is likely to limit productivity) • Siltation of reservoirs • Fertilizer runoff and leaching; eutrophication and effect on human health • Runoff of pesticides and similar agricultural chemicals • Eroded agricultural genetic resources essential for food security in the future. • Increased pesticides harms animal and human	agroforestry practices • Integrate in the agroforestry system crops with low moisture demand • Harvest water during the rainy water for dearth period use • Firebreak structure and equipment should be in place • Implement watershed management practice to protect reservoirs • Protect the farmlands with integrated soil & water conservation (biological & physical) measures • Use of inputs (fertilizers and other chemicals) based on soil and plant tissue analysis for nutrient • Treat water before using • Protect the farmlands with integrated soil & water conservation (biological & physical) measures • Never erode the local	to long gestation period of the trees • Traditional monoculture farming system • Intensive care for the various agroforestry practices consumes the time and energy of household members • Create farmers to depend on agricultural inputs like fertilizer • Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides • affects human health due to agricultural chemicals • Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women • Limited purchasing capacity of inputs	from diversified crops and trees • Opt for fast growing tree species • Research centers should work on improving (shortening) of the long gestation period of local tree species • The agroforestry system should integrate at least 2 and above 2 tree species with other crops • Encourage agriculture intensification by the use of compost (other than chemical fertilizer) especially for smallholder farmers • Use integrated pest management system which proved best than single types of pest management practice • Give awareness creation on health and safety of agro-chemicals • Use of personal protective equipment whenever applying agro-chemicals

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<p>management</p> <ul style="list-style-type: none"> • Tillage and residue Management • Water management techniques 	<p>health by accumulating in soils and leaching into water bodies</p> <ul style="list-style-type: none"> • Salinization and regimes of underground water • Inadequate drainage and over-irrigation causes water logging • Lowering of water tables • Water diversions for agriculture are a major problem for many aquatic species. 	<p>genetic resource; work side by side on both local and improved crop varieties to enhance food security</p> <ul style="list-style-type: none"> • Use personal protective equipment whenever applying chemicals • Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops • Continuous leaching of the farms with water • Irrigate the farms based on the soil water requirement analysis • Use drip irrigation to avoid both under and over irrigating • Implement practices that recharge ground water (watershed management, soil & water conservation structure) • Diversion of water to only the threshold level beyond which aquatic live do not 	<p>(improved seeds, fertilizers seedlings) can limit potential gains</p> <ul style="list-style-type: none"> • CSA sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively • Only rich farmers may benefit from CSA • Prevalence of water-borne diseases (giardia, schistosomiasis, etc.) may increase • Increased exposure to malaria • Shortage or lack of water resource to downstream users • Conflicts between neighboring communities over water resource utilization 	<ul style="list-style-type: none"> • Offer continuous and sustained education & awareness creation on the appropriate use of chemicals • Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers • Educate and train community on the benefit of CSA • Assist poor farmers technically and materially • Educate and give sustainable training to the community on water and sanitation including water borne diseases • Enhance health facility for the treatment of water borne diseases if these are inevitably occurring • Avoid water logging through adequately draining • Disturb stagnant water continuously to break the

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
		<p>affected</p> <p>• Use the waste for</p>		<p>breeding/life cycle of the insect</p> <ul style="list-style-type: none"> • Cater mosquito net to the community • Implement wise and fair use of water • Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community • Harvest excessive water during the high moisture seasons for the later dearth period use • Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community • Identify local and oversea markets for the products • Maintain milk cows • Purchase and transport milk from surplus area

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<ul style="list-style-type: none"> • Yield increasing techniques for agriculture • Improved livestock management systems • Enhancing and intensification of animal mix • Live stock value-chain efficiency improvement 	<ul style="list-style-type: none"> • Solid wastes expected from poultry farm • Nuisance odor expected from poultry farm • Mechanization leads to intensive use of agricultural inputs that results in pollution 	<p>fertilizing soil in farm land</p> <ul style="list-style-type: none"> • Poultry farm to be performed far from the residential areas • Implement the EMP recommended in the ESIA of the project whenever available • Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any 	<ul style="list-style-type: none"> • Market problem of the products of livestock may be a challenge • Milk malnutrition especially to the kids • Bird diseases that is communicable to human may be a problem • Loss of assets (livestock) to be used for emergency case by selling 	<ul style="list-style-type: none"> • Sanitation to be maintained 24 hours a day, 7 days a week • Bio-safety measures to be taken • Educate farmers on saving of what is earned (from the main income generating or alternative income sources activities) • Maintain few livestock to be used as an asset
<p>SO8: Reduce demand for fuel wood and charcoal-</p>	<ul style="list-style-type: none"> • Increased use of energy inefficient stove may indirectly lead to high biomass energy demand and consumption which in turn cause deforestation 	<ul style="list-style-type: none"> • Go for alternate energy sources (such as solar, wind, hydropower, geothermal) 	<ul style="list-style-type: none"> • Incur cost to poor local communities • Difficult to adopt the technology due to cultural barriers (e.g. Preference of open over closed stoves for fumigation reasons) • Difficult to adopt the 	<ul style="list-style-type: none"> • Supply of energy efficient cooking and baking gadgets at subsidized price • Avail electricity at affordable price by the community • Encourage farmers build corrugated/bricks roof house over hatch house so that

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<ul style="list-style-type: none"> • Energy Efficient stoves 			<p>technology in abundant forest resource areas</p> <ul style="list-style-type: none"> • May be difficult to supply energy efficient cooking stoves, biogas and electricity over short period of time • May be difficult to supply the stoves in high demand areas due to long production-marketing chain • Stoves in high demand areas due to long production-marketing chain • Exploitation by middle men in the market chain • Time taking: long awareness creation and technology adoption process 	<p>there will be no fumigation</p> <ul style="list-style-type: none"> • Educate and enhance the awareness of the community on modern style of living • Educate and give sustained training on the relative advantage of electricity/fuel efficient stove over the traditional stove • Avail electricity and cooking/baking stoves at very attractive price • Solicit fund for the soonest project implementation e.g. fuel efficient cooking/baking stoves catering • Begin with the few number of farmers and gradually increase it • Build the capacity of community members for own community demand making of the stoves • Build the capacity of community members for own community demand making of the stoves • Build the capacity of

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<ul style="list-style-type: none"> • Biogas 	<ul style="list-style-type: none"> • Reduces organic residue return to the production system • Mismanagement may create additional release of methane to the atmosphere 	<ul style="list-style-type: none"> • Manage sludge efficiently and ensure maintenance of residues in the farm system • Apply proven technology and provide sufficient technical skill training to users 	<ul style="list-style-type: none"> • High initial investment cost may not attract rural farmers • Lack of management skill may discourage farmers 	<p>community members for own community demand making of the stoves</p> <ul style="list-style-type: none"> • Begin with few number of farmers and gradually increase it • Focus on institutional and communal schemes than individual households • Facilitate access to soft loans • provide the necessary skill training
SO9: Increase wood and charcoal supply	<ul style="list-style-type: none"> • Exotic species may dominate as these are fast growing than the indigenous • Environmental degradation during 	<ul style="list-style-type: none"> • Researching on fast growing indigenous tree species • Employ semi-mechanized system during harvesting • Harvest based on the 	<ul style="list-style-type: none"> • Market problem may be a challenge • high transport, operation and maintenance costs and the length of time it takes to reach 	<ul style="list-style-type: none"> • Look potential local and oversea forest products • improve road network in the coming GTP2 years • create wood market centers at optimum distance from

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
<ul style="list-style-type: none"> Woodlots (small-holder and community) 	<ul style="list-style-type: none"> harvesting and transporting time Adverse micro-climate modification after harvesting The act induces more numbers of charcoal users which means more carbon emission Environmental pollution by particulate matters from the use of charcoal High calorific value wood plantation leads to monoculture that brings about loss in biodiversity Fire risks from the tree species planted for charcoal production as they are susceptible to ignition 	<ul style="list-style-type: none"> rotation period (do not harvest all at a time) Sequester the emitted carbon by planting trees of environmental value (e.g. for carbon financing, ecosystem protection) Use charcoal gadgets with chimney and lid that prevent entry of particulate into the environment Allow natural regeneration under the plantation Have different plantation sites for biodiversity and environmental protection Construct fire breaks between blocks of forest Build capacity (human and material) to suppress fire in case it sets 	<ul style="list-style-type: none"> commercial centers May bring food insecurity as farm lands devoted to plantation Labor may be a problem for the family to harvest the forest products Transporting to the market center may be a problem due to low farmers' financial capacity Loss of livestock due to communal land (such as grazing lands) allocation for tree planting Animal protein malnutrition (meat & milk) due to loss of livestock's grazing lands go for tree plantings Charcoal market problem may be encountered Indoor air pollution that may cause acute and chronic respiratory diseases, malignancies of the aero-digestive tract 	<ul style="list-style-type: none"> the plantation area Transport food from surplus production area Incorporate NTFP (such as honey) in the system Hand operated simple machine catering to tree farmers at subsidized price Organize in CBO and pull the resource together to solve financial problem Encourage tree plantings on marginal lands and own plot Transport from met and milk surplus areas Assess the feasibility of charcoal market before embarking on it Educate on the health impacts of indoor charcoal pollution Ventilate rooms whenever using charcoal

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
			and lungs, burns, eye diseases	
SO10: Improved livestock management-	<ul style="list-style-type: none"> • Solid wastes expected from poultry farm • Nuisance odor expected from poultry farm • Mechanization leads to intensive use of agricultural inputs that results in pollution 	<ul style="list-style-type: none"> • Use the waste for fertilizing soil in farm land • Poultry farm to be performed far from the residential areas • Implement the EMP recommended in the ESIA of the project whenever available • Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any 	<ul style="list-style-type: none"> • Market problem of the products of livestock may be a challenge • Milk malnutrition especially to the kids • Bird diseases that is communicable to human may be a problem • Loss of assets (livestock) to be used for emergency case by selling 	<ul style="list-style-type: none"> • Identify local and oversea markets for the products • Maintain milk cows • Purchase and transport milk from surplus area • Sanitation to be maintained 24 hours a day, 7 days a week • Bio-safety measures to be taken • Educate farmers on saving of what is earned (from the main income generating or alternative income sources activities) • Maintain few livestock to be used as an asset
SO11: Promote supplementary income generation	<ul style="list-style-type: none"> • Large number and frequent entry into the forest for NTFP collection affects soil seed bank, regeneration and biodiversity • Fuel wood collection as NTFP affects the carbon 	<ul style="list-style-type: none"> • Provide increased access to collect NTFP from the forest • Opt for/expand other sources of energy • Distribute fuel efficient cooking/baking stoves • Utilize the forest resource 	<ul style="list-style-type: none"> • Conflict arise if unfair access or use right on NTFP prevail within the community 	<ul style="list-style-type: none"> • Provide fair access to community members, especially the underserved and women

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
	<p>stock of the forest</p> <ul style="list-style-type: none"> • Some NTFP expand at the clearance of forest (e.g. coffee forest of the country) • More number of forest enterprises put the forest under pressure • May aggravate deforestation and forest degradation with the increase of the prices of forest products and NTFP parallel to increase in value chain 	<p>based on the management plan of the source</p> <ul style="list-style-type: none"> • annual increase in volume of the forest must matches with the harvest • Marginal profit of the participants of the value chain involver to be determined 		
SO12: Capacity building	<ul style="list-style-type: none"> • Capacity building may only focus on entities that have direct linkage to REDD+ • Soft capacity may not reduce deforestation unless financial and material support is provided 	<ul style="list-style-type: none"> • Inclusion of all relevant experts in the forestry sector at different levels • Capacity support should include facilities and financial support to forest sector offices 	<ul style="list-style-type: none"> • Participation of women and wider stakeholder groups may be neglected • Support may be shared by those who already have the needed capacity 	<ul style="list-style-type: none"> • Ensure the participation of women is prioritized and all stakeholders have to the opportunity to participate • Support should prioritize those with serious capacity problem
SO13: Inter-sectoral coordination on planning and implementation-	<ul style="list-style-type: none"> • Lingering decision making process may result in further destruction of forest resources 	<ul style="list-style-type: none"> • Put in place a workable mechanism that facilitates with checks and balance in making timely decisions 	<ul style="list-style-type: none"> • Stakeholders may not collaborate as desired 	<ul style="list-style-type: none"> • Establish stakeholder coordination and mobilization unit for the daily follow up

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
	<ul style="list-style-type: none"> • Inaction may weaken law enforcement and cause loose control over uncontrolled extraction 	<ul style="list-style-type: none"> • Increased accountability and transparency in the decision making process 		
SO14: Demand-driven Research and extension linkage	<ul style="list-style-type: none"> • High priority environmental issues may be neglected • Research results may not lead to action on the ground 	<ul style="list-style-type: none"> • Research needs identification and prioritization should be carried • Academics and forestry sector experts should work together to apply research outputs 	<ul style="list-style-type: none"> • Community needs may not be properly addressed • Underserved communities may not benefit from the research and extension 	<ul style="list-style-type: none"> • Maximize local stakeholder involvement in need identification • Ensure inclusiveness by involving underserved communities in the research process and benefit sharing
SO15: Ensure full participation and equitable benefit for women	<ul style="list-style-type: none"> • Loss of cultural, medicinal, etc. value species may occur while disregarding others than women 	<ul style="list-style-type: none"> • Allow all community segment (men & women, youth & elders, etc.,) contribute available knowledge for the management of the natural resource 	<ul style="list-style-type: none"> • Weak collaboration of sectoral institutes in mainstreaming gender • Disregard/ marginalize knowledge and expertise of others (other area skill & knowledge will be eroded overtime) 	<ul style="list-style-type: none"> • Build and strengthen institutional capacities of implementing partner organizations (IPOs) in gender and REDD+ issues • Allow all community segment (men & women, youth & elders, etc.,) contribute available knowledge for the management of the natural resource
SO16: Benefit sharing	<ul style="list-style-type: none"> • REDD+ implementation may result in more deforestation and forest degradation if it carries cost to the community 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation • Give opportunity for the 	<ul style="list-style-type: none"> • Community may refuse to accept costs that REDD+ project brings to them • Lack clear mechanisms for sharing benefits may 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation • There should be policy,

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Strategic options	Environmental		Social	
	Risks	Mitigation measures*	Risks	Mitigation measures**
	<ul style="list-style-type: none"> Late recognizer of the benefit of the REDD+ project may adversely affect the REDD+ project forest 	<p>late adopters to become the member and enjoy the benefit</p>	<p>result in grievances</p> <ul style="list-style-type: none"> Overridden stakeholders adversely affect the implementation of REDD+ project Income difference may be created between the REDD+ project members and non-members Unequal participation in the development of bylaw may bring disparities in implementing the bylaw 	<p>strategy and bylaw that define clear benefit sharing mechanism</p> <ul style="list-style-type: none"> Implement indigenous grievance redress mechanism Exhaustively involve stakeholders based on their degree of contribution Create alternate income generating opportunities for the non-members of the REDD+ projects Bring the non-members to members of the REDD+ project Let all community members participate in the development of the bylaw

**The responsible stakeholders for implementing the environmental mitigation measures, including monitoring indicators and verifications, are given in Table 18.*

*** The responsible stakeholders for implementing the social mitigation measures, including monitoring indicators and verifications, are given in Table 19.*

5.3 Suggested Enhancement Strategic Options for Further Consideration in line with the Social and Environmental Situations

After consultations with stakeholders on the proposed strategic options, enhancement strategic options are identified, which can be incorporated into the existing strategic options for a better implementation of REDD+ project.

5.3.1 Positive Social and Environmental Impacts of the Proposed REDD+ Enhancement Strategic Options

Table 12: Analyses of the social and environmental benefits of the proposed (suggested) Enhancement Strategic Options

<i>Suggested Enhancement Strategic options (ESO)</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
ESO1: Diversifying local Livelihoods to Non-forest based Options	<ul style="list-style-type: none"> Reduced dependence on forest resources for communities in and around forestland areas will decreased the risk of deforestation and forest degradation 	<ul style="list-style-type: none"> Increases access to alternative income sources for local communities and forest dependent communities Improve food security, improve health, creates job opportunity Increase income,
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit the poor segment of society)	<ul style="list-style-type: none"> Reducing poverty decreases the pressure on forests and reduces deforestation by forest dependent communities 	<ul style="list-style-type: none"> Pro-poor development activities will lift significant proportion of the population from absolute poverty and will increase their participation in local development initiatives.
ESO3: Promoting participation and empowering of underserved communities	<ul style="list-style-type: none"> Underserved communities have little access to services and largely rely on natural resources deemed “open access” resources. Thus, empowering through provision of services (education, credit, health, etc....) and increasing their participation will reduce their dependence on natural resources and reduced degradation. 	<ul style="list-style-type: none"> Promotes social inclusion and faire distribution of services to the needy and more disadvantaged groups of society. Increases accountability, and reduces illegal activities and corruption
ESO4: Design strategies and revise policies to address the impacts of internal and external social conflicts on forest resources	<ul style="list-style-type: none"> Designing strategies and implementing forest resource utilization and management guidelines in refugee and IDP areas 	<ul style="list-style-type: none"> Strict regulation and control of resource utilization in internally displaced people (IDP) and refugee areas will create opportunities for alternative livelihoods

Suggested Enhancement Strategic options (ESO)	Environmental Benefits	Social Benefits
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> Ensuring equity and fair distribution of resources will reduce the dependence on natural resources and avoids the risk of deforestation and degradation 	<ul style="list-style-type: none"> Ensuring equity improves access to social services (education, health, clean water, inputs, finance, etc....) Improves governance and democracy
ESO6: Ensuring fair and balanced allocation of resources to the sector	<ul style="list-style-type: none"> Providing the required financial resource to the forestry sector will improve policy implementation, law enforcement and enhance protection and conservation of forest resources 	<ul style="list-style-type: none"> Financial capacity will increase employment opportunities in the sector and will also increase the contribution of the sector to the national GDP
ESO7: Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> Regulating and managing population growth will reduce the risk of expanding agriculture to marginal and forest resource areas 	<ul style="list-style-type: none"> Measures that facilitate family planning in areas of high population density, especially in forest areas will improve quality of life
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	<ul style="list-style-type: none"> Reducing the rate of in-migration from internal and external sources to the forest regions reduced the rate of deforestation and forest degradation 	<ul style="list-style-type: none"> Controlling spontaneous migration of people from inside and outside the country to the forest areas will avoid social conflicts and competition over resources
ESO9: Ensure a well regulated and managed resettlement program	<ul style="list-style-type: none"> Revising the policy and enforcing implementation guidelines on resettlement spare forestlands from being used for resettlements and reduce deforestation 	Resettlements are implemented only according to implementation guidelines (pre and post resettlement)
ESO10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> Providing environmental education to communities will reduce the degree of deforestation, forest fires, and agricultural clearing 	<ul style="list-style-type: none"> Increased local community awareness on the intergenerational and ecosystem wide benefits of forests Increased awareness on the environmental, economic and social values of forests and their habitats
ESO11: Implement radical measures to stop the root causes of corruption	<ul style="list-style-type: none"> Reducing and stopping the practice of corruption in the sector and in the other sectors will reduce the rate of deforestation 	<ul style="list-style-type: none"> Stopping corruption will ensure good governance, accountability and transparency Zero tolerance to corruption will nurture democracy

5.3.2 Adverse Social and Environmental Impacts and Mitigation Measures for the Proposed REDD+ Strategic Options

Table 13: Analyses of the adverse social and environmental impacts and mitigation measures of the proposed (suggested) Enhancement Strategic Options

Proposed Enhancement Strategic Options (ESO)	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
ESO1: Diversifying local Livelihoods to non-forest based Options	<ul style="list-style-type: none"> The non-forest based options might lead to increased need for wood products and land, which might indirectly increase the risk of deforestation 	<ul style="list-style-type: none"> Options should focus on provisions of skill development trainings and opportunities to be engaged in non-farming job opportunities Providing support for non-forest based small and micro-enterprises focused on services and production of consumer goods and others 	<ul style="list-style-type: none"> The uneducated and disadvantaged groups of the community might be left out from the opportunities Forest dependent communities may find it difficult to resort to new options and might face challenges 	<ul style="list-style-type: none"> Ensure inclusiveness and support activities with community's needs and interests Options should provide priorities to the needs of forest dependent communities. Provide the necessary training and awareness on proposed alternatives
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit the poor segment of society)	<ul style="list-style-type: none"> Development plans and programs targeting the poor could lead to more exploitation of resources, especially forest resource 	<ul style="list-style-type: none"> Review and adjust development plans and programs through stakeholder consultation and participation 	<ul style="list-style-type: none"> Development opportunities are often end up benefiting the resource rich and the elite groups 	<ul style="list-style-type: none"> Put in place a mechanism to ensure the resource poor and the disadvantaged are targeted and included
ESO3: Promoting participation and empowering of underserved communities	<ul style="list-style-type: none"> Delegating power without the checks and balances may lead to corruption and further degradation of the resources 	<ul style="list-style-type: none"> Empowering should be with accountability and transparency Participation need to include all social groups 	<ul style="list-style-type: none"> Misuse of power might favor few members of the community and lead to illegal activities 	<ul style="list-style-type: none"> Fair representation and accountability should be ensured Social groups from the underserved communities need to be

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Proposed Enhancement Strategic Options (ESO)	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
		(women and the youth)		equally represented
ESO4: Design strategies and revise policies to address the impacts of internal and external social conflicts on forest resources	<ul style="list-style-type: none"> • Lack of implementation of such policies further increase rate of deforestation • Lack of inter-regional coordination on the issue and absence of harmonized strategy among the regions may create implementation gaps and result in forest degradation 	<ul style="list-style-type: none"> • Ensure guidelines on resource utilization are implemented and seriously followed • Establish inter-regional coordination and operational framework when conflicts happen and result in displacement of people 	<ul style="list-style-type: none"> • Leniency by local groups towards displaced persons and indifference to the destruction of resources 	<ul style="list-style-type: none"> • Impartiality in implementation of the strategies and strict control over incompliance is needed
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> • High disparity in income and increasing gap between the haves and have-nots will result in increased reliance on forest resources for income 	<ul style="list-style-type: none"> • Ensure wealth is fairly distributed among citizens and trickled down to the poor through services provision and taxation 	<ul style="list-style-type: none"> • High taxation may discourage investment and slow down development, causing increased unemployment 	<ul style="list-style-type: none"> • Distribution of wealth can be achieved not only through taxation but fair distribution of development projects across the nation
ESO6: Ensuring fair and balanced allocation of resources to the sector	<ul style="list-style-type: none"> • Lack of resources results in poor management of forest resources. Sufficiently available resource increases capacity to stop illegal activities 	<ul style="list-style-type: none"> • Allocate sufficient resource for the sector and consider the potential of forestry for the growth of GDP in the country 	<ul style="list-style-type: none"> • Other social sectors (health and education) might be constrained and the growth of those sectors might be affected (financially and human resource) 	<ul style="list-style-type: none"> • Base resource allocations on proper analysis of the development needs, the gaps and priority level of the particular sector
ESO7: Implementing actions to regulate the high rate of	<ul style="list-style-type: none"> • Absence of sufficient labor might also affect forest 	<ul style="list-style-type: none"> • Strategies should take into account specific 	<ul style="list-style-type: none"> • Some religious and social groups might 	<ul style="list-style-type: none"> • Support implementation with sufficient

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Proposed Enhancement Strategic Options (ESO)	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
population growth, including policy review	management and protection activities	local conditions and population dynamics, needs and availability	oppose the moves • Controlling population might reduce labor force	awareness creation trainings and through full participation of social groups • Interventions take into account local needs
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	• Controlling in-migration may increase pressure in affected areas (e.g., drought) leading to resource degradation	• Evaluate Drought and land degradation affected areas for development potentials before out-migration	• The resource poor and the weak might not be able to make ends meet	• The necessary support should be provided to the poor in areas where out-migration is discouraged
ESO9: Ensure a well regulated and managed resettlement program	• Unplanned and unregulated resettlement results in extensive deforestation	• Ensure resettlements are implemented using approved guidelines on land and resource use	• Absence of guidelines and exertion of pressure on resettled communities lead to social conflict	• Ensure proper guidelines are put in place
EOS10: Ensuring communities have the right and positive attitude towards forests	• Negative attitude towards forests being seen as harboring pests leads to deforestation	• Educate local communities on the wider ecological roles and benefits of forests	• Changing attitudes may antagonize local values and beliefs for some groups	• Take into account and work through social values and beliefs when teaching
ESO11: Implement radical measures to stop the root causes of corruption	• Corruption may not easily be stopped unless systemic measures are taken and thus the moves might even aggravate further deforestation	• Measures need to stem from root sources and actions be systemic than case treatment	• Measures might disfavor or favor certain social groups	• Ensure that measures are applicable regardless of status, power, or connections

6. ESMF for REDD+ Implementation

Environmental and Social Management Framework (ESMF) is a tool used by a project proponent to identify and address the potential environmental and social concerns or impacts of a project right from the planning stage to its implementation and post-implementation operations. The objective of developing an ESMF is to mainstream safeguards issues in the planning, execution and post-execution stages of projects/subprojects in order to ensure that environmental and social concerns are adequately taken care of in all these stages. This ESMF has been developed to be used by the Ministry of Environment, Forest and Climate Change, and other governmental and non-governmental organizations who participated or may participate in REDD+ program or projects in Ethiopia in order to incorporate the environmental and social safeguards in the planning, execution and operation stages of each project activity. A step-by-step methodology is provided below that can be followed along with institutional interventions required.

6.1 Steps of the ESMF

The national REDD+ Secretariat has already preparing a standalone consultation and participation plan document in order to engage all stockholders throughout the REDD+ readiness process. Public consultations, as part and parcel of the ESMF and environmental assessment process, is also critical in preparing an effective and sustainable REDD+ program and project. The first step in this regard is to hold public consultations with local communities and all other stakeholders during the screening process and in the course of conducting ESIA of the REDD+ project. These consultations should identify key issues and determine how the concerns of all parties will be addressed. To facilitate meaningful consultations (See Annexes 11 and 15), the project planners will provide all relevant material and information concerning the projects in a timely manner prior to the consultation, in a form and language that are understandable and accessible to the groups being consulted. The outcome of consultations will be incorporated as appropriate in the designs and mitigation plans.

6.1.1 Environmental and Social Screening Process

Screening is the process of determining whether or not a project requires ESIA and the level at which the assessment should occur.

REDD+ is categorized as category 'B' according to the World Bank Safeguard Policy (OP/BP 4.01) and the program activities will most likely not require a full scale ESIA. However, environmental and social analysis is necessary, and appropriate instrument(s) (such as ESIA and ESMP) have to be prepared to prevent, minimize, mitigate or compensate for adverse impacts and maximize beneficial impacts on a sustainable basis, as outlined in this ESMF.

The woreda /zone/regional safeguard officers will be responsible for the project initiation process by properly preparing and submitting the screening report or form to their respective responsible officers or departments for review and approval. During REDD+ investments/activities selection by communities, development agents have to check whether the identified program activities fall into the categories that are eligible or not for financing under the REDD+ Program activities. See Annexes 5 and 6 for further information on eligibility screening checklist for subprojects (at kebele level, the

smallest administrative unit in Ethiopia) and on checklist for environmental and social impact of REDD+ investment interventions respectively. To this effect, the safeguard specialists of the woreda/zone/region and development agents at kebele level will receive relevant environmental and social assessment training.

This ESIA screening report will describe the:

- a) proposed activities and their potential impacts
- b) characteristics of the location (sensitivity of the area)
- c) size (small, medium and large scale)
- d) degree of public interest
- e) institutional requirement, environmental enhancement and monitoring considerations

The outcome of screening will result that each REDD+ project is categorized as being a Category B³ or C⁴ project; and relevant safeguards instruments (ESIA/ESMPs) will be developed to address environmental and social issues and risks as outlined in this ESMF. Further, any program activities that would be considered as category 'A' will not be financed by the REDD+ Program.

The screening report will be documented and submitted to the relevant department of the regional/zonal bureau of environment and forest with a request for approval. The Regional/Zonal Bureau of Environment and Forest will review the screening report and will:

- (a) Accept the document - with conditions relating to implementation if required-for Category C REDD+ projects/investments which do not require ESIA;
- (b) Accept the document with required guidance and/or recommended amendments for proceeding to a scoping step; or
- (c) Reject the document with comments as to what is required to submit as an acceptable screening report.

6.1.2 Scoping and ToR Preparation

The objective of the scoping activity is to identify the requirements needed in the preparation of the terms of reference (ToR) that can be used to secure and guide a consultant or expert group who has the required expertise and who will carry out the preparation of the required safeguards instruments (such as ESIA/ESMP) for the REDD+ projects(s). Therefore, the scoping stage will be carried out (by an independent consultant or Woreda REDD+ Safeguard Officers in collaboration with Zonal or Regional REDD+ Safeguard Officers) to develop a ToR for undertaking a full scale or partial ESIA as per the safeguards requirement of the GoE and the World Bank. The scoping report

³ *Category B projects: They maynot require ESIA, but will necessitate the inclusion of environmental and social mitigation and enhancement measures in the design and implementation of the projects through the use of standard environmental and social management plan*

⁴ *Category C projects: Apart screening, they are not subject to environmental assessment as little or no potential adverse impacts are anticipated*

identifies the objectives, scope (including project area of influence⁵), determine appropriate methodologies, tasks to be undertaken, administrative and legal Policy framework, reasonable alternatives, potentially affected groups, the issues or concerns to be assessed, understand local values, the significant effects and factors to be considered, qualification of the ESIA study team/consultant, duration of the Study, and estimated costs for conducting the ESIA. Therefore, scoping is a crucial step to identify relevant issues and eliminates those of little concern. In this way, it ensures that ESIA are focused on the significant effects and do not involve unnecessary investigations that waste time and resources.

The process is completed with the Terms of Reference (TOR) to provide clear instructions on the information that needs to be submitted, and the studies to be undertaken to compile that information. The TOR defines the scope of the environmental and social assessment, methodologies of the assessment, the responsibilities or obligations of the environmental and social assessment team, and the expected outputs, among others. Generally, the TOR may include background to the project (including objectives, scope, size and baseline information of the project), setting the context of the problem, policy/legal/administrative framework, institutional and public involvement, analysis of impacts (including alternatives), mitigation and monitoring, and conclusions and recommendations. A suggested ToR for ESIA preparation is attached in Annex 9.

The ToR for the ESIA will be submitted to the regional bureau of environment and forest (RBEF) with a request for approval. The RBEF will review ESIA ToR and accept the document (with conditions relating to preparation of the right safeguards instruments), accept the documents with required guidance and/or recommended amendments, or reject the document with comments indicating what is required to submit an acceptable ESIA ToR.

6.1.3 Conducting ESIA

Environmental permits are needed for projects for which ESIA may be required as per the ESIA guidelines. The ESIA will identify and evaluate potential environmental and social impacts for the proposed activities, evaluate alternatives, and design mitigation measures. The preparation of the ESIA will be done in consultation with stakeholders, including people who may be affected. Public consultations are critical in preparing a proposal for the activities of the REDD+ projects likely to have impacts on the environment and communities. The public consultations (see Annex 15) should identify key issues and determine how the concerns of all parties will be addressed in the ESIA.

According to the guideline series documents of environmental and social impact study reports (2003), and World Bank operational policy (OP 4.01), the structure and contents of the report of

⁵*Project area of influence*: The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, and construction camps, as well as unplanned developments induced by the project (e.g., spontaneous settlement, logging, or shifting agriculture along access roads). The area of influence may include, for example, the watershed within which the project is located; off-site areas required for resettlement or compensatory tracts; migratory routes of humans, wildlife, or fish, particularly where they relate to public health, economic activities, or environmental conservation; and areas used for livelihood activities (hunting, fishing, grazing, gathering, agriculture, etc.) or religious or ceremonial purposes of a customary nature, among others. World Bank OP 4.01.

ESIA may follow the following format. Also, see Annex 10 for further and detail information on the ESIA contents.

- Executive Summary
- Introduction
- Approach to the study
- Assumptions and/or Gap in knowledge
- Administrative, Legal and Policy requirements Project description, including project area of influence
- Assessment
 - Baseline data/information (biophysical Environment and socio-economic environment)
 - Analysis of alternatives
 - Analysis and synthesis of environmental and social impacts.
- Process and record of public consultations
- Environmental and social management plan (ESMP): mitigation, monitoring plan, and institutional strengthening, including estimates of costs and responsibility for implementation of surveillance and monitoring
- Conclusions and Recommendations
- References
- Appendices
 - Terms of reference
 - List of persons/institutions met
 - List of the ESIA study team members, including qualifications and work experience
 - Approved minutes of consultations
 - Flow charts and site maps;

6.1.4 Review and Approval

The main purpose of the review is to examine and determine the completeness and quality of the ESIA and the environmental and social management plan (ESMP⁶) for decision making purpose and consider its implications for REDD+ projects/subprojects implementation. Therefore, the review process is very instrumental to ensure whether the identified REDD+ projects/subprojects are

⁶Depending on the nature of REDD+ investments/subprojects, reviewer(s) have to check whether ESMPs for subprojects have used sector specific EIA guidelines of the Government of Ethiopia, as well as World Bank's Environment, Health and Safety Guidelines where relevant and applicable.

environmentally sound and socially acceptable for decision making as per the safeguards requirements of the GoE and the World Bank.

The Screening Report, ESIA and ESMP, will be presented by the Woreda REDD+ safeguard officer who is responsible for the implementation of the project and will also submit the documents to the Zonal or Regional Bureau of Environment and Forest (BEF) for review and approval.

The review will be conducted by the Zonal or Regional BEF, and will include review of: a) Screening Report including the ESIA/ESMP ToR; b) ESIA report and ESMP; and c) Performance monitoring or audit reports at different stages in the project cycle.

The review by Zonal or Regional BEF may include considerations of the adequacy of:

- compliance with the environmental and social requirements (legal and procedural)
- information with regard to :
 - Compliance with the "approved ToR"
 - Required information
 - The examination of alternatives, assessment of impacts, appropriateness of mitigation measures and monitoring schemes as well as implementation arrangements
 - the use of scientific and appropriate methodologies
 - The extent of public involvement and reflection of PAPs concerns and
 - Presentation of the information to decision makers

Based on the result of the environment impact study report review and the analysis of stakeholders' interests, including public consultations, the RBEF will decide whether to accept the REDD+ safeguards instrument (ESIA/ESMP) as it stands, reject the report or request that the document should be amended. If the REDD+ project is approved, the RBEF will impose conditions, such as implementation of the environmental and social management plan, periodic submission of report on the environmental and social performance of the REDD+ project, among others. For projects financed by the WB, the subproject safeguard documents will need to be reviewed and cleared by the WB (before approval is issued by the Government) and reports will need to be submitted to the WB.

It is also vital to emphasize that the decision-making should be consultative, participatory and influence others to behave responsibly and sustainably. Also, it should acknowledge and implement mandates and responsibility. A summary of evaluation, including reasons for decision, should be documented. Lastly, approval of a proposal cannot immune REDD+ project proponet(s) from being accountable of the occurrence of adverse significant impacts in the course of the implementation of a REDD+ project.

6.1.5 Public Consultation and Disclosure

In compliance with Government of Ethiopia EIA proclamation no. 299/2002, guidelines, and World Bank safeguard policies (OP/BP 4.01), public consultation on, and disclosure of, REDD+ investment safeguards instruments are mandatory. Therefore, before the approval of a REDD+

project/investment, the applicable documents (ESIA, ESMP) must be made available for public review at a place accessible to local people (e.g. at a local government office (i.e. Kebele or Woreda council, Zonal and Regional bureaus, at the BEF), and in an appropriate form, manner, and language they can understand, as over 80 languages are spoken in Ethiopia.

6.1.6 Monitoring and Follow-up

The purpose of monitoring is to check the effectiveness and relevance of the implementation of the proposed mitigation measures for the adverse social and environmental impacts. Monitoring will be done by Woreda BEF. It will be carried out in accordance with the procedures and at the intervals prescribed in the ESMP. When approval has been given to the ESIA/ESMP, a systemic follow-up is needed to:

- ensure that the anticipated impacts are maintained within the levels predicted;
- see that the unanticipated impacts are managed and or mitigated before they become problematic;
- realize and optimize the benefits expected; and
- provide information for a periodic review and alteration of the environmental management plan and enhance environmental protection through good practice at all stages of the project.

6.1.7 Monitoring Plan (MP)

The Monitoring plan sets out the requirements for the monitoring of the environmental and social impacts of the REDD+ projects. Monitoring of environmental and social indicators will be mainstreamed into the overall monitoring and evaluation system for all projects. In addition, monitoring of the implementation of the ESIA will be carried out by RBEF and the key implementing institutions of REDD+.

6.1.7.1 Objectives of the Monitoring

The objectives of monitoring are to:

- Alert project owners by providing timely information about the environmental and social management process outlined in the ESMF in such a manner that changes can be made as required to ensure continuous improvement to REDD+ environmental management process; and
- Make a final evaluation in order to determine whether the mitigation measures incorporated in the technical designs and the ESMP have been successful in such a way that the pre-project environmental and social condition has been restored, improved upon or is worse than before and to determine what further mitigation measures may be required.

6.1.7.2 Monitoring of Environmental and Social Indicators

A number of relevant indicators in the project M&E system will enable the tracking of environmental and social issues. The final design of the M&E system will take account of the following.

6.1.7.2.1 Initial Proposals

The key issues to be considered in the REDD+ projects include monitoring of forest cover, biodiversity indicators, agricultural productivity, and accesses to NTPF and income generation. The goals of monitoring are to measure the success rate of the project, determine whether interventions have resulted in dealing with negative impacts, whether further interventions are needed or monitoring is to be extended in some areas. Monitoring indicators will be very much dependent on specific project contexts.

6.1.7.2.2 Monitoring of Participation Process

The following are indicators for monitoring of the participation process involved in the project activities.

- Number and percentage of affected households consulted during the planning stage
- Frequency and quality of public meetings
- Degree of involvement of women or vulnerable groups in discussions

Monitoring of implementation of mitigation plans lists the recommended indicators for monitoring the implementation of mitigation plans

6.1.7.2.3 Evaluation of Results

The evaluation of results of environmental and social mitigation can be carried out by comparing baseline data collected in the planning phases with targets and post-project situations (See Annex 14).

7. ESMF Implementation Institutional Arrangements

7.1. General

The implementation of ESMF will be based on the existing government structure (figure 16). All concerned government bureaus and offices at all levels and all beneficiary community members will be owners of the project and are active participants in implementing of the ESMF and REDD+ projects.

Currently, The REDD+ Secretariat under the MEFCC coordinates the overall REDD+ activities to achieve the objectives set related to REDD+ projects. So, the overall responsibility of the REDD+ Secretariat is to ensure whether or not environmental and social issues are adequately addressed within the context of REDD+ implementation. The implementation of the REDD+ projects will take at different levels from national to local and hence all involved institutions in the implementation of the REDD+ projects assume different roles and responsibilities. The REDD+ Secretariat will maintain contact with the sectoral institutes to update information and documentation as needed to meet the objectives of the ESMF.

7.2. ESMF Implementation

7.2.1 The Principles of ESMF Implementation

The principles on which the institutional arrangement for REDD+ is based include good governance, decentralization to appropriate levels, inclusiveness, cost effectiveness and accountability in all REDD+ implementation activities. Box 8 gives general precautions the REDD+ implementers need to follow.

Box 8

Note to the Implementers of the ESMF and REDD+ Projects

The ESMF implementers need to check the following:

- Adequate capacity needs to be built at all levels (National to Kebele levels) in terms of human resources and materials to implement the ESMF
- The REDD+ project implemented complies with the issues stipulated in the ESMF
- Potential adverse environmental impacts arising from the REDD+ project must be scrutinized
- Adequacy and feasibility of the proposed safeguard mitigation measures and monitoring plans, including the social development plan as part of the SESA or Process Framework for restrictions of access to resources.

7.3.1 National Level Institutional Arrangement

7.3.1.1 Ministry of Environment, Forest and Climate Change (MEFCC)

The CRGE document of Ethiopia disclosed that the forestry sector is a significant contributor of GHG emissions. At the same time, forest offers an abatement opportunity of the emission from the forest and other sectors as well. The GOE has established MEFCC to contribute to the achievement of the objectives which it set in the CRGE strategy. Hence, MEFCC as nodal Ministry for the REDD+ program, is the primary implementing agency of the REDD Program including the safeguard instrument ESMF at the national level. The Ministry has established the National REDD+ Secretariat through which it communicates all the issues of REDD+ and related activities. The Ministry has also established different committees at the national levels and assigned REDD+ Coordination Unit at some regions and REDD+ focal persons in the rest of the regions. Moreover, all regional states are planning to establish environment and forest offices that can be responsible for the forest and environment sector then the institutional arrangement of REDD+ will be housed to these offices as it is at federal level. These institutions at different levels gear towards the effective implementation of the ESMF. MEFCC is responsible to check ESIA, ESMF are in place as recommended and stipulated in this document.

7.3.1.2 The National REDD Steering Committee (NRSC)

Chaired by MEFCC and composed of higher officials, regional governments and relevant sectoral ministries, the committee is devoted to offering advisory services for the effective and righteous implementation of ESMF. The Committee is also established to play the guiding role regarding the overall issues related to REDD+. In general, the NRSC is required to provide strategic direction and policy guidance for the implementation of REDD+ as well as ESMF. It is also required to ensure inter-ministerial coordination, harmonization and alignment among donors for the implementation of ESMF.

7.3.1.3 The National REDD Technical Working Group (RTWG)

The RTWG is established to scrutinize the management of the REDD+ strategy development and simultaneously ensure the implementation of ESMF as required and recommended. Its key role is to ensure there is an established synergy between the activities related to REDD+ and the other sectors for the implementation of ESMF and REDD+ projects, among others. The RTWG as a group represents experts from research, academia, government, NGOs and other development organizations in charge of offering technical advice and guidance for the implementation of REDD+. The SESA and C & P task force is drawn from the technical working group.

7.3.1.4 The National REDD+ Secretariat

Directly responsible to the Forest State Minister, the Federal REDD+ Secretariat is established to coordinate the overall issues pertinent to REDD+ and REDD+ activities including ESMF implementation. The Secretariat is composed of high caliber technical staffs trained and specialized on REDD+, environmental and social safeguards and MRV. Its administrative staffs are giving backbone to it to effectively and efficiently discharge the objectives which established for. The

Secretariat is supported by the RTWG and provide overall technical guidance to the REDD+ Readiness process, preparation and implementation of the REDD+ projects. The Secretariat safeguards experts are responsible for the design and implementation of all internationally required safeguard instruments including the ESMF and also ensure the integration of safeguard issue in REDD+ strategy. The REDD+ Secretariat will facilitate the validation and verification processes related to GHG calculations carried out at various levels from local sites to regional and national.

The National REDD+ Secretariat is required to create a strong working synergy and relationships on natural resources, government institutes at federal and regional levels and donors for the effective and fruitful implementation of ESMF. Overall, this task can be achieved by the robust and consistent decision making of the REDD+ Secretariat.

7.3.1.5 The National REDD+ Task Force

7.3.1.5.1 The SESA Consultation and Participation Task Force

Mapping and analyzing of stakeholders are required to identify who will contribute what and who and entitle who will be the beneficiaries and the loser of the REDD+ project. This requires consultation and participation of stakeholders at all levels (from national to Kebele/local levels). The SESA taskforce, is therefore responsible for carrying out consultations and participation and identifying interested groups to be involved in the REDD+ process and its implementation. The task force is responsible for ensuring the proper implementation of the safeguard instruments including ESMF and C & P. In addition, the Task Force will also monitor the implementation of various ongoing REDD+ readiness activities and REDD+ pilot projects, aiming at establishing good governance and ensure full and effective inclusion of social and environmental safeguards in the design and implementation of REDD+ strategy.

7.3.2 The Regional Level Institutional Arrangement

Currently, MEFCC is thought of having a similar institutional arrangement as that of other national (federal) government institutes in regional governments too. There will be Regional REDD Steering Committees (RRSC), Regional REDD Technical Working Groups (RRTWG) and Regional REDD+ Coordination Units (RRCU) as the REDD+ issues hold foot in all the regions. The overall intention of having similar institutional arrangement in the regional governments as in the federal government is to ensure an effective REDD+ implementation system that is consistent with the national level organization in addition to ensuring a more representation within each of the regions. MEFCC has proposed that regional governments to establish appropriate REDD+ management structures for Woreda and Kebele levels in their respective regions as deemed necessary.

7.3.2.1 Regional REDD Steering Committees (RRSC)

In addition to those already formed (e.g., Oromia), the regional REDD Steering Committees (RRSC) will be established in the other regions to ensure institutional coordination and provide overall policy guidance to the project for the implementation of ESMF. In addition, the RRSC will be responsible for:

- Providing overall supervision of project implementation
- Approving the overall annual work program and
- Reviewing the annual implementation performance report prepared by the Regional REDD Coordination Unit (RRCU) in relation to key performance indicators.

The RRSCs will conduct a frequent meeting (with the frequency to be determined) to discuss the activities mentioned above and resolve ESMF implementation issues at the Woreda level as the need y arise.

7.3.2.2 Regional REDD Technical Working Groups (RRTWG)

The RRTWG too follows the National REDD Technical Group way of establishment and overtaking of assignment related to REDD+ projects and implementation of ESMF but is at the regional government level. The RRTWG will be pulled from regional sectoral offices, research institutes, academia, NGOs and other development. Its objectives are to provide technical support and guidance for the implementation of REDD+ projects and ESMF in line with the national one. RRTWG will offer training to Woreda experts, who in turn will be responsible to conduct extensive consultations to engage the local community at grass root level in REDD+ process. Oromia region has already established its RRTWG and this need to be cascaded into other regions.

7.3.2.3 Regional REDD+ Coordination Units (RRCUs) /Focal Person

The Oromia Regional Government REDD+ Coordination Unit was established in 2014 and is actively working for the REDD+ pilot project soliciting and implementation in the region. The Oromia Region REDD+ Coordination Unit Office is located in Oromia Forest and Wildlife Enterprise with its technical and supporting staff members hired.

In other regions, such as Amhara, Tigray and SPNN, the Coordination Units were established in May 2015 and hence have not been fully functional yet, but are hosted by related regional offices. The recently established REDD+ Coordination Units in the other regions follow the objectives and pattern similar to that of Oromia for facilitating regional REDD+ Readiness and implementation of REDD+ pilot projects in line with the ESMF implementation.

The RRCU is expected to have strong working relations with the REDD+ Secretariat and also guides and supports the Woreda level implementation Unit of ESMF. The Woreda level implementation Unit regularly communicates with the RRCU and also ensures the implementation of the REDD+ actions on the ground through technical support to the Kebele level implementation. Oromia region was the pioneer to establish REDD+ Coordination Unit followed by Amhara and Tigray regions. There are no safeguard experts except in Oromia region for the implementation of ESMF. Hence, other regions are required to hire safeguard experts as soon as possible.

7.3.2.4 Regional REDD+ Focal Persons

All the other regions, including Gambella, Benishangul-Gumuz, Afar and Somali are represented by focal persons instead of the Coordination Units as the REDD+ processes and activities are not as well advanced as in the other regions represented by the REDD+ Coordination Unit. The regional REDD+ focal persons act as coordinators of the REDD+ readiness processes. The representation of the

regions by focal persons sounds the late implementation of the REDD+ projects after observing the results from the other regions represented by REDD+ Coordination Unit-particularly Oromia Region. In Benshangul Gumz Regional State, UNREDD+ started to involve in regional legal institutional issues.

7.3.3 Zonal and Woreda Level Institutional Arrangements

The Zonal and Woreda level government offices are expected to facilitate the implementation of the REDD+ projects and ESMF at grass-roots/local levels. These offices are responsible to address the challenges and provide solutions to activities that hamper the implementations of REDD+ projects and ESMF in their respective realm of administration. Agriculture Development Bureau, Pastoral Community Agency, Cooperative Promotion Agency, Finance and Economic Development Bureau, Workers and Social Affairs Bureau, Education Bureau, Health Bureau, Women and Children Affairs Bureau and other government offices will take part and contribute the implementation of ESMF.

7.3.4 Kebele Level Institutional Arrangements

The actual implementation of REDD+ project and ESMF will take place at the Kebele level. Development Agents (DAs) in the Kebele will support the implementation of the activities of ESMF. CBOs/PFM will ensure the participation in REDD+ projects and ESMF implementation at the ground level. The protection of forests and other natural resources will be more reliable by the participation of local level government administrators and CBOs/PFM. The implementer at grass root level require capacity building training on safeguard tools for a successful implementation of the tools.

7.3.5 Community Level Institutional Arrangement

Traditional community institutions (e.g. Gadaa System in Oromia Region, Gepitato System in Shaka People and ediris exercised in various regions) and community based organizations (WAJIB, BaBuB and other associations on NTFP) and others are intuitions that play a major role and also responsible for the protection and the sustainable use of the resources for years into the future. These institutions that are carrying the responsibility for the protection and sustainable use should also be entitled for the benefit sharing that the REDD+ offers. The active and full participation of the community and their institutions is the best and probably the only way to ensure the success of the REDD+ projects and the ESMF implementations.

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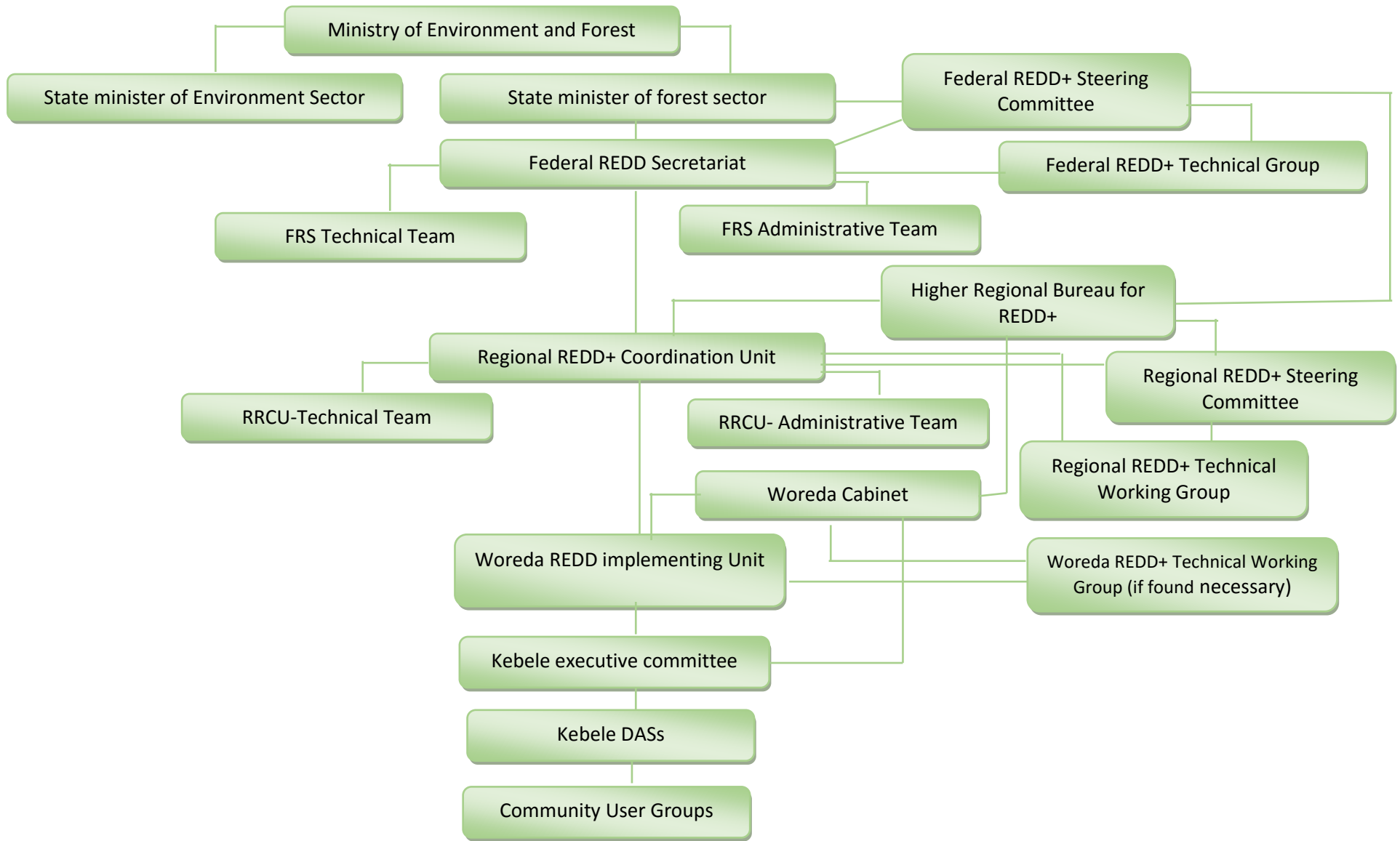


Figure 5: Existing REDD+ Institutional Arrangement (Source: MEFCC, 2015)

7.4 Other Collaborating Institutions for the Implementation of the ESMF

Ethiopia has embarked on ambitious plan to build a green economy based on the four pillars of the CRGE. The four CRGE pillars are forestry, agriculture, power and transport. Of these, forestry, agriculture and energy are the most relevant to REDD+ and hence to the ESMF implementation.

7.4.1 National Level Collaborators for the ESMF Implementation

7.4.1.1 Ministry of Agriculture and Natural Resources (MoANR)

Ethiopia aims to become a carbon-neutral middle-income country before 2025 as envisaged in the national Growth and Transformation Plan one (GTP1). The plan is thought to be achieved by increasing agricultural productivity, strengthening the industrial base, and fostering export growth. Within the MoANR, there are two units relevant to the implementation of ESMF and overall REDD+ issues. The first one is the forestry case team and the second one is the environment unit. The forestry case team in MoANR is responsible for afforestation and reforestation of lands not used for the agricultural/farming purposes. It also responsible for administering this same forest and others which is not in the concession of regional forest enterprises (in region where there are forest enterprises). When the REDD+ projects is implemented in the area where it is administered by the forestry case team under MoANR, it requires the collaboration of both for an effective and successful implementation of the REDD+ projects, and hence ESMF.

The environment unit under the MoANR is basically established to carry out evaluation and award of environmental clearance certificate of the ESIA of agricultural projects which are executed by investors after the land being granted by the Ministry. The actions bring conflict of interest emanating from proclamation 2009/2002 because the proclamation vested the power of issuing environmental clearance to the environmental authority/ministry but not to other sectoral institutes.

7.4.1.2 Ministry of Water, Irrigation and Electricity (MoWIE)

The Ministry is responsible for implementing cook stove expansion that is one of the proposed strategic option to reduce forest degradation caused by fuel wood extraction. The Ministry also delegated by the then federal environmental protection authority to give environmental clearance and monitor its implementation of the activities including cooking stoves. Thus, the ministry will involve in REDD+ safeguard implementation.

7.4.1.3 Ministry of Finance and Economic Cooperation (MoFEC)

The Ministry of Finance and Economic Cooperation (MoFEC) is a member of REDD+ Steering Committee (Federal Negarit Gazette, Proclamation no. 691/2010) and is responsible for giving strategic direction with the regard to the initiation and implementation of projects that brings about growth and development as stipulated in the Growth and Transformation Strategic Document. It is upon the consent of the Ministry that grant is signed and loan is approved. MoFEC is one of the pivotal institutes that ensures the implementation of REDD+ projects and ESMF through securing fund/loan and disbursing it for its implementation.

7.4.1.4 Ethiopian Biodiversity Institute (EBI)

One of the objectives for the establishment of the Ethiopian Biodiversity Institute is to rescue the country's plant genetic resources from adverse impacts of various human activities and natural disasters which is in line with the objectives of the REDD+. In its recent re-establishment (proclamation no. 81/2004 for the establishment of Institute of Biodiversity Conservation and later renamed as EB), the institute's mandate is broadened to implement Ethiopia's obligation to the Convention of Biological Diversity (CBD). The implementation of REDD+ in the country provides the support to the institute in materializing its objective of conserving the forest and other genetic resources of Ethiopia. The institute will share its experience and strategy of forest genetic resource conservation to the REDD+ Secretariat and other REDD+ project implementers. The institute can participate in capacity building for the implementation of REDD+ projects and ESMF.

7.4.1.5 Ethiopian Wildlife Conservation Authority

The Ethiopian Wildlife Conservation Authority (EWCA) is mainly devoted to the conservation of wildlife which cannot be realized without due protection of their habitats both terrestrial and aquatic. Forests are one of the major habitats for many of the endemic wildlife of Ethiopia. REDD+ projects implemented in forest areas ensure the perpetuity of forests and consequently the conservation of the wildlife habitat. Thus, EWCA needs to be a strong partner with MEFCC to create synergy for the effective conservation of wildlife habitat. The safeguard instruments of REDD+ will also make the outcome of the intervention more sustainable. The capacity of EWCA regarding safeguard instruments implementation is, therefore, important.

7.4.2 Regional Level Collaborators for ESMF Implementation

The regional agriculture and rural development/pastoralist, energy, finance and economic development and land & environmental protection offices need to establish to develop a strong working relationships and active collaboration in line with their respective Federal Ministries to implement REDD+ projects and ESMF.

7.4.3 Other Collaborators and Partners for the Implementation of ESMF

Multi and bilateral organizations such as The Government of Norway, The Royal Government of the Netherlands, UK supports technically and financially the effective implementation of ESMF. So far, they contributed great deal both at international and local levels to that ends. Several development partners (for instance, FARM Africa/SOS Sahel, Ethic-Wetlands, GIZ, and World Vision) have been working on REDD+ initiatives here in Ethiopia, and it is hoped in the future that they will continue the same with more efforts. The roles and responsibilities of stakeholders for the implementation of the ESMF in Ethiopia is shown in Table 14.

7.5 Roles and Responsibilities of Key Stakeholders for the Implementation of ESMF

Table 14: Roles and Responsibilities of key stakeholders for the implementation of ESMF

Level	Key Players	Roles and Responsibility for Environmental and Social Management Framework Implementation
National	MEFCC	<ul style="list-style-type: none"> • Cross checks sectoral and cross-sectoral offices objectives to identify if there is supplementing or overlapping or contradicting to its objectives for implementing REDD+ and its safeguard tools (such as SM, RPF and PF) • Coordinates the overall REDD+ implementation processes are carried out per the ESMF recommendation • Manages social and environmental issues (including safeguards issues) at both central level as well as in each of the project sites. • Assists the ESIA implementation of REDD+ projects per ESMF. • Manages environmental and social awareness and orientation activities. • Assists in the full participation of communities in the implementation of REDD+ projects • Develops ToR of projects to do with environmental and social issues • Develop Environmental Management Plan for environmental projects that demand EIA under category A and B • Identifies best practices on benefit sharing accrued from natural resources • Commissions environmental audit to be carried out by independent entity/consultant • Collaborates with government agencies and NGOs working in nature's conservation like IUCN, WWF etc. • Assess and report on the current status of formerly recognized national forest priority areas (NFPA)
	MoANR	<ul style="list-style-type: none"> • Identifies lands not suitable for agriculture and report to MEFCC for REDD+ project implementation • Confirms projects implemented under it comply with the social and environmental laws of the land
	MoWIE	<ul style="list-style-type: none"> • Identifies and implements energy projects that reduce dependence of the community on wood which is in line with the strategic options of REDD+ • Confirms projects implemented under it comply with the social and environmental laws of the land
	EIAR	<ul style="list-style-type: none"> • Identifies species to be used in the afforestation/reforestation schemes REDD+ implements • Conducts researched based on the needs and gaps identified
	Academia	<ul style="list-style-type: none"> • Identifies and provides information relevant to REDD+ and its safeguard instruments.

Level	Key Players	Roles and Responsibility for Environmental and Social Management Framework Implementation
		<ul style="list-style-type: none"> • Involve in capacity building
	EWCA	<ul style="list-style-type: none"> • Identifies and reports to MEFCC wildlife habitats and others administered under it not to be interfered and used for the implementation of REDD+ • Confirms projects implemented under it comply with the social and environmental laws of the land
	Ethiopian Investment Agency	<ul style="list-style-type: none"> • Involve in the preparation of investment policy and harmonization of it with other policies such as in agriculture, and issuance of investment license in forestry investment
	Ethiopian Roads Authority	<ul style="list-style-type: none"> • Involves in the identification of impacts of major roads on forests and prepares EIA for such projects to avoid negative impacts
	Ministry of Justice	<ul style="list-style-type: none"> • Involve in the implementation of forest laws and improvement or amendment of the enforcement mechanisms (regulations, guidelines, etc...)
	Ministry of Mines	<ul style="list-style-type: none"> • Involves in the identification of impacts of major mining projects on forests and prepares EIA for such projects to avoid negative impacts
Regional	Forest and Wildlife Enterprise	<ul style="list-style-type: none"> • Identifies and reports to MEFCC wildlife habitats and others administered under it not to be interfered and used for the implementation of REDD+ • Implement REDD+ and its safeguard instruments
	Land and Environmental Protection Bureau	<ul style="list-style-type: none"> • Identifies lands to be used for the REDD+ implementation • Issues environmental clearance certificate for projects that qualify for implementation • Follows the timely and rightly implementation of EMP given in the projects • Takes action on projects not implemented per the recommended mitigation measures and EMP
District	MEFCC or regional BEF safeguard specialists	<ul style="list-style-type: none"> • Follows the implementation of REDD+ is done as recommended and expected • Reports gaps identified during the implementation phase of REDD+ to the next level • Accepts grievance and take action within their mandates and reports others not resolved to the next level decision makers
Kebele	Community and MEFCC or regional BEF safeguard specialists	<ul style="list-style-type: none"> • Identifies gaps and report to the district office • Presents complaint for unfulfilled pledges and promises of REDD+ • Identifies new impacts unforeseen during the planning and design phase of REDD+ and propose mitigation measures

8. Outline of Capacity Building Actions for Entities Responsible For Implementing the ESMF

Capacity building actions are needed to all REDD+ implementers and stakeholders involved in the implementation of the ESMF. The range of stakeholders who will be involved in the implementation of the ESMF for the REDD+ project is diverse and include forest-dependent communities, the private sector (project consultants/contractors), government staff and many other stakeholders interested in the REDD+ processes. The capacity building requirements will mostly be in the form of training which includes workshops, seminars, long, medium and short term trainings on different aspects of environmental and social issues, REDD+ project implementation, ESMF, ESMF and PF.

Well-designed learning objectives should be S.M.A.R.T.

- Specific: precisely describe what learners should achieve
- Measurable: make an assessment of whether or not the objective is achieved
- Achievable: can be accomplished in the time allocated
- Result oriented: should lead to a concrete result
- Time bound: can be achieved in a predetermined duration

For all parties that will be involved in the implementation of the REDD+ project(s) and the ESMF, the following major training areas are identified to be given at different phases (REDD+ construction, implementation and monitoring & evaluation phases). These include the:

- National safeguard instruments particularly ESIA regulations, relevant sectoral ESIA guidelines, how to review & monitor ESIA reports
- Social & environmental implication (risks & opportunities) of REDD+
- Role of forests in emission reduction and the science of climate change
- REDD+ related international and national legal frameworks
- Participation and Consultation plans developed for REDD+ implementation
- Grievance Redress mechanism and benefit sharing mechanism of REDD+
- Stakeholder engagement in the implementation of ESMF and REDD+ activities
- The scale of REDD+ implementation at different levels [National, regional Jurisdiction and Projects) and nested approaches to REDD+].
- Elements and perspectives on free, prior and informed consultation (FPIC) in the context of REDD+
- REDD+ social and environmental safeguards (SESA, ESMF, RPF, PF, SIS, and SES)
- Project screening
- Environmental and social impact assessments (ESIA) of REDD+ projects

8.1. Requirements for Implementing the ESMF

8.1.1 Institutional arrangements

The issues of REDD+ and its implementation is coordinated by the National REDD+ Secretariat under the Ministry of Environment and Forest (MEFCC). Institutional arrangements from higher to local (Kebele) levels as well as safeguard instruments are required for the full-fledged implementation of the ESMF. The REDD+ Secretariat and MEFCC at federal level coordinate and monitor the implementation of the safeguard instruments. The already established SESA and Consultation and Participation Task Forces (drawn from different GOs, NGOs, Media and Academia) continue in monitoring and enhancing engagement of different stakeholders in the implementation of the safeguard instruments.

At Regional and Woreda levels the Environment and forestry offices which are expected to be established soon will be responsible to oversee the implementation of the ESMF. In Oromia OFWE the regional REDD+ implementing office in collaboration with the Environment and Forest office planned to be established in next fiscal year will be responsible for the implementation. The existing and recommended institutional arrangements are presented in section 7 of this document.

8.1.2 Stakeholder Engagement and Participation

SESA and Consultation and Participation Task Force need to be strengthened to ensure the engagement and participation of the stakeholders and the community. Strengthening the National Steering Committee and establishing the Regional Steering Committees (except in Oromia where this is already established) to oversee and monitor the proper implementation of the REDD+ including the safeguard instruments and ESMF with the engagement of stakeholder and communities. Regular continuous trainings and awareness creations based on the consultation and participation plan developed for national and Oromia (pilot) are expected to enhance stakeholders and community engagement and participation.

8.1.3 An Outline of Capacity Building Actions for Implementing the ESMF

Capacity building is critical in REDD+ and ESMF implementations. Capacity building includes both human and material resources. Human resource capacity building enables implementers and collaborators of REDD+ and ESMF equipped with the understandings, skills and access to information, knowledge and to achieve the required objectives of REDD+ and ESMF. Implementers and collaborators need to know the basics of social and environmental issues of REDD+ and ESMF through sustainable capacity building through training and material support such as preparations and distributions of relevant documents (printed, radio and video). Table 15 depicts the capacity building needed through trainings at different levels for various institutes and Table 16 shows the human and material needs achieve it.

Table 15: Capacity building needed through training for the ESMF implementation

No	Institutions	Status	Area of Training and awareness creation	Who needs the trainings	Who can provide the trainings
1	National Level				
1.1	MEFCC				
1.1.1	REDD+ Secretariat and Taskforce	Existing	<ul style="list-style-type: none"> • REDD+ safeguard (environmental and social) related to international and national legal frameworks • Elements and perspectives on free, prior and informed Consultation (FPIC) in the context of REDD+ project implementation • Environmental and social impact assessments (ESIA) of REDD+ projects • ESMF implementation monitoring • SIS (Safeguard Information System) • Environmental and social monitoring • Environmental auditing 	<ul style="list-style-type: none"> • Decision making officials • REDD+ Secretariat staffs • Key stakeholders identified • SESA C& P Task Force • CRGE Coordinating body 	<ul style="list-style-type: none"> • International and/or local consultants/expert • Universities and research institutes
1.1.2	Environment and project monitoring directorate	Existing	<ul style="list-style-type: none"> • awareness creation on REDD+ legal safeguard instruments (ESIA, SESA, ESMF, RPF, PF, SIS, environmental and social monitoring, and environmental auditing 	<ul style="list-style-type: none"> • ESIA team 	<ul style="list-style-type: none"> • Experts at the National REDD+ office, • Local Consultants • Addis Ababa University
1.1.3	Parliament Standing Committee for the Environment	Newly elected Members of Parliament	<ul style="list-style-type: none"> • Social and environment co-benefit of REDD+ • Drivers of deforestation and role of REDD+ projects to address the same 	<ul style="list-style-type: none"> • Environment standing committee members 	<ul style="list-style-type: none"> • Experts at the REDD+ secretariat • Oromia REDD+ experts • National

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No	Institutions	Status	Area of Training and awareness creation	Who needs the trainings	Who can provide the trainings
					consultants
1.2	Environmental and Social Development Unit of MoANR	Existing	<p>Awareness on:</p> <ul style="list-style-type: none"> • REDD+ projects relevance to agriculture and rural development • CRGE vs REDD+ project and its implementation • The role of the MoANR in the implementation of ESMF and REDD+ activities 	<ul style="list-style-type: none"> • Unit members 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants
1.3	Environmental and Social Development Unit of MoWIE	Existing	<p>Awareness on:</p> <ul style="list-style-type: none"> • REDD+ projects relevance to agriculture and rural development • CRGE vs REDD+ project and its implementation • The role of the MoWIE in the implementation of ESMF and REDD+ activities 	<ul style="list-style-type: none"> • Unit members 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants
1.4	EWCA experts		<ul style="list-style-type: none"> • REDD+ related national legal frameworks • Awareness creation on REDD+ ESMF, RPF and PF implementation • REDD+ social and environmental safeguards • The role of the respective ministries for the implementation of ESMF and REDD+ projects 	<ul style="list-style-type: none"> • Higher decision making officials • Unit/person working closely on environment and social issues 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants
2	Regional Level				
2.1	REDD+ Units/Focal person	Existing & for newly	<ul style="list-style-type: none"> • REDD+ benefit sharing mechanism, Grievance Redress Mechanism 	<ul style="list-style-type: none"> • Unit members/focal person and regional 	<ul style="list-style-type: none"> • Experts from the national REDD+

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No	Institutions	Status	Area of Training and awareness creation	Who needs the trainings	Who can provide the trainings
	(ORCU - safeguard experts, Amhara REDD+ Coordination Unit, SNNPR REDD+ Coordination Unit, Tigray REDD+ Coordination Unit) Focal Persons	proposed safeguard experts at the three newly established REDD+ Coordination unit (Amhara, Tigray and Oromia)	<ul style="list-style-type: none"> • Elements and perspectives on free, prior and informed consultation (FPIC) in the context of REDD+ • REDD+ social and environmental safeguards • Screening of REDD+ projects • Environmental and social impact assessments (ESIA) of REDD+ projects • Participatory MRV • REDD+ safeguard implementation, monitoring and evaluation framework 	proposed experts	office <ul style="list-style-type: none"> • National consultants
2.2	Forest Enterprises (OFWE and Amhara Forest Enterprise)	Existing	<ul style="list-style-type: none"> • TOT training on REDD+ safeguard instruments implementation and engagement of grass root community • Elements and perspectives on free, prior and informed consultation (FPIC) in the context of REDD+ • Environmental and social impact assessments (ESIA) of REDD+ projects • REDD+ implementation, monitoring and evaluation framework 	<ul style="list-style-type: none"> • Higher decision making officials • Unit/person working closely on environment and social issues at district level 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants
2.3	Agriculture and Rural Development Office	Existing	<ul style="list-style-type: none"> • Awareness creation on REDD+ implementation, Stakeholder engagement in the implementation of ESMF and REDD+ activities social and environmental safeguards 	<ul style="list-style-type: none"> • Higher decision making officials • Unit/person working closely on environment and social issues 	<ul style="list-style-type: none"> • Regional coordination unit focal persons • National REDD+ office experts
2.4	Environmental		<ul style="list-style-type: none"> • REDD+ related international and national 	<ul style="list-style-type: none"> • Higher decision making 	<ul style="list-style-type: none"> • Regional

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No	Institutions	Status	Area of Training and awareness creation	Who needs the trainings	Who can provide the trainings
	Protection Bureau		safeguard instrument <ul style="list-style-type: none"> Stakeholder engagement in the implementation of ESMF and REDD+ activities social and environmental safeguards ESIA 	officials <ul style="list-style-type: none"> Unit/person working closely on environment and social issues 	coordination unit focal persons <ul style="list-style-type: none"> National REDD+ office experts
3	District/Woreda level				
	Forest and environment experts	MEFCC cascaded offices experts	<ul style="list-style-type: none"> ToT training on REDD+ safeguard instruments and implementation of ESMF awareness creation Implementation of REDD+ projects 	<ul style="list-style-type: none"> Experts on social safeguard Experts on environmental safeguard 	<ul style="list-style-type: none"> Regional REDD+ coordination unit focal persons
4	Local/Kebele level				
4.1	DA	Existing & proposed	<ul style="list-style-type: none"> Screening of projects Identifying of PAPs ESMF implementation Monitoring REDD+ projects and programmes Natural resources/forest management 	<ul style="list-style-type: none"> DA working on natural resources DA working forestry Extension worker DA working on agriculture 	<ul style="list-style-type: none"> District level environment experts
4.2	Government administration at Kebele level		<ul style="list-style-type: none"> Identifying of PAPs Benefit Sharing issues ESMF implementation Community mobilization for REDD+ project implementation Role of CBO/PFM in forest/natural resource management/protection 	<ul style="list-style-type: none"> Development forces (<i>yelimat serawit</i>) Kebele manager Kebele administrators Kebele security forces Kebele cabinets 	<ul style="list-style-type: none"> District level environment experts

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No	Institutions	Status	Area of Training and awareness creation	Who needs the trainings	Who can provide the trainings
			<ul style="list-style-type: none"> • Monitoring REDD+ projects 		
4.3	Community		<ul style="list-style-type: none"> • REDD+ project benefit sharing • Role of community participation at different phases REDD+ project and ESMF implementation • REDD+ project implementation and risks associated • Monitoring REDD+ projects 	<ul style="list-style-type: none"> • CBO/PFM members • Forest dependent members of the community • Women • Youth 	<ul style="list-style-type: none"> • District level environment experts
5	Others				
5.1	NGOs	Existing/new	<ul style="list-style-type: none"> • ESMF application/implementation • Community outreach work • Community mobilization for the implementation of ESMF • NGOs role for the implementation of ESMF, REDD+ projects 	<ul style="list-style-type: none"> • FARM Africa/SOS Sahel • Ethic Wetlands • GIZ • Other identified as key stakeholders 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants
5.2	Private sectors		<ul style="list-style-type: none"> • Awareness creation on ESMF, REDD+ issues • Private sectors contribution for the implementation of ESMF, REDD+, environmental protection 	<ul style="list-style-type: none"> • Those working/dealing with forest/natural resource • Consultants working on environment/natural resources 	<ul style="list-style-type: none"> • Experts from the national REDD+ office • National consultants

Table 16: Material, human resource and technical capacity building requirement

No	Institutions	Status	Capacity required
1	National Level		
1.1	MEFCC		
1.1.1	REDD+ Secretariat	Existing	<ul style="list-style-type: none"> • REDD+ Safeguard Information System manual
1.1.2	Environment and project monitoring directorate	Existing	<ul style="list-style-type: none"> • Environmental auditing guideline, • Revision of forest sector ESIA guideline to incorporate,
1.2	EWCA	Existing	<ul style="list-style-type: none"> • Technical support on RPF & PF for relevant directorate
2	Regional Level		
2.1	REDD+ Units/Focal person (REDD+ Coordination units in Amhara, Tigray & SNNPR)	Existing	<ul style="list-style-type: none"> • ESMF Monitoring checklist translated into local language • Human resource recruitment: <ul style="list-style-type: none"> ○ Environmental safeguard ○ Social safeguard
3	District/Woreda level		
	REDD+ Focal persons Woredas	Proposed	<ul style="list-style-type: none"> • ESMF Monitoring checklist translated into local language • Checklists, forms, TORs
4	Local/Kebele level		
4.1	DA	Existing	<ul style="list-style-type: none"> • Technical assistance by District REDD+ Unit/focal persons • Checklists, forms, TORs
4.2	Government admin at Kebele level	Existing	<ul style="list-style-type: none"> • Technical assistance by District REDD+ Unit/focal persons
4.3	Community	Existing	<ul style="list-style-type: none"> • Technical assistance by District REDD+ Unit/focal persons
5	Others		
5.1	NGOs	Existing/new	<ul style="list-style-type: none"> • Technical assistance by National REDD+ Secretariat/ Regional REDD+ Unit or focal persons
5.1	CBOs	Existing/new	<ul style="list-style-type: none"> • Technical assistance by National REDD+ Secretariat/ Regional REDD+ Unit or focal persons
5.2	Private sectors	Existing/new	<ul style="list-style-type: none"> • Technical assistance by National REDD+ Secretariat/ Regional REDD+ Unit or focal persons

9. Outline of the Budget for Implementing ESMF

The budget required during the 4 years of the project lifetime is estimated at USD 1,852,000. The budget is required for capacity building of the direct REDD+ safeguard implementers. The details and breakdown of the budget is depicted in table 17.

Table 17: Required Budget for Implementing ESMF

No	Activity	Description	Budget (000) USD	
			Annual	Total
A	Staffing	A.1. Regional RCU Environment and Social safeguard specialists for Amhara, Tigray, SNNPR and Oromia pilot projects - two for each region.	96	384
		A.2. BGRS, Gambella, Afar & Somali – employment of two regional safeguard specialists for each of the regions	96	384
B	Training	B 1.1. ToT for regional REDD+ safeguard specialists on Participatory MRV in order to engage the local community on measurement and reporting, (five days)	50	200
		B1.2. Training on environmental monitoring and safeguard policies, procedures and relevant sectoral guidelines, ESMF checklists, specifically focusing on screening process, sub-project categorization, for government environment offices at region and Woreda level and safeguard specialists of REDD+ (for four days)	30	120
		B 2. Awareness creation on consultation and participation plan, ESMF implementation, environmental and social Impact screening process for NGOs, private sector	15	60
		B. 3. Awareness creation on REDD+ projects relevance to different sectors (agriculture and rural development, Ministry of water & energy) CRGE vs REDD+ project and its implementation, REDD+ safeguard instruments for federal, and regional implanting agency	25	100
		B 4. Awareness creation on REDD+ benefit sharing mechanism, grievance redressed mechanism for CBO leaders	15	60
		<ul style="list-style-type: none"> • Elements and perspectives on free, prior and informed consultation (FPIC) in the context of REDD+ • Seminar for higher decision makers & members of the parliament 	10	40
C	Materials & tools	Translate and publish checklist, formats	24	96
D	Disclosing REDD+	Publishing materials: publishing brochures twice & Newsletter at list in three different languages	60	180

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	implementation & safeguard information on Media	Electronic media: Radio & TV information dissemination on safeguard instruments once in different languages	40	120
	In country experience sharing tour	<ul style="list-style-type: none"> Conduct in country experience sharing tour once a year among safeguard implementing experts in a region where there is effective & efficient safeguard instrument implementation 	15	60
E	Monitoring & Evaluation	Independent evaluator	12	48
	Total			1,852

10. Provisions for Monitoring and Evaluation

10.1 Definition of terms

Monitoring

Monitoring is a continuous process that involves collection and analysis of information to assist in timely decision making, ensure accountability and provide the basis for evaluation and learning. The methodical collection of data of an ongoing project or program with early indications of progress and achievement of objectives provides management and stakeholders the information required for monitoring.

Evaluation

Evaluation encompasses periodic assessment of the appropriateness of the projects 'through a set of applied research techniques to generate systematic information that can help improve performance' (IUCN, 2001). It includes formal external, independent evaluations and 'self-evaluation processes which can help to build an internal culture of reflection and evaluation, as well as stronger ownership of the results' (IUCN, 2001). In the context of REDD+, evaluation refers to the process reviewing the appropriateness, efficiency, effectiveness and impacts of the REDD project at all levels (i.e. activity, output and impact levels; across all sites and for the entire project lifetime).

10.2 Monitoring REDD+ projects

The implementation REDD+ projects should ensure that environmental and social aspects the implementation process are carried out and being carried out within the frameworks of the environmental and social safeguards. To realize this, monitoring at both local and national levels should be carried out. The monitoring process should also make sure that the implementation outcomes would benefit all stakeholders across the board from local to national level and eventually contribute in the fight to reduce emission internationally.

The monitoring process of the REDD+ activities at both local and national levels should be carried out in a continuous manner so that the mitigation measures to safeguard the social and environmental components of the execution spheres are done in accordance to the suggested procedures and actions.

10.2.1 Types of Monitoring

Monitoring is and will be a key component of the ESMF during REDD+ project implementation. Periodic monitoring is important based on the activities to be implemented. The objective of conducting monitoring and evaluation are to ensure the efficiency and quality of the Environmental and social assessment processes, make better the environmental and social management performance, and give the chance to report the results on safeguards and impacts and anticipated mitigation measures implementation. In REDD+ ESMF, there are compliance monitoring, impact monitoring and commutative impact monitoring that got due emphases in other countries.

10.2.1.1 Compliance Monitoring

This is to confirm that the necessary mitigation measures are considered and implemented. During the Project preparation phase, compliance with the monitoring activities will focus on ensuring effective ESMF implementation following the procedures established. The national and regional REDD+ Environmental safeguard specialists and social development specialists will ensure that REDD+ sub-projects studies are properly and timely conducted in compliance with the Country's and World Bank's safeguard operational policies. The feasibility studies will also include an assessment of the conditions for implementation of the RPF and PF as applicable.

10.2.1.2 Impact Monitoring

Once the implementation begins, the monitoring of the impact and the mitigation measures of a project remains the duties and responsibilities of the government (MEFCC) at different levels. It is expected that the environmental and social safeguards documents will be given to the REDD+ implementing stakeholders and these will be monitored to ensure that the activities are preceding in accordance with the laid down mitigation measures. The responsible safeguard specialists at national and regional levels need to monitor and evaluate the social and environmental impacts such as measures on grievance redress mechanisms, impacts on gender, forest dependent communities and others based on the identified monitoring milestones.

10.2.1.3 Cumulative Impacts Monitoring

The impacts of the REDD+ projects on the environmental and social resources within the region and broadly in the country will also be monitored taking into consideration other developments which might be established. In order to make effective monitoring and ensure inclusive management of cumulative impacts, there should be cooperation between REDD+ implementing body and other development stakeholders.

10.2.2 Monitoring, Evaluation and Reporting (MER)

The monitoring, evaluation and reporting (MER) of REDD+ projects should be distributed across all levels (national to Kebele levels) in order to ensure the effective implementation process and engagement of all stakeholders in following up the activities in their respective areas and scopes.

10.2.2.1 Responsibilities for Monitoring, Evaluation and Reporting

In the Ethiopian context, the process of monitoring, evaluation and reporting can be more effectively executed by separate but complementing bodies that will be created at the national, regional, Woreda and Kebele levels. These MER bodies can work under the national REDD+ secretariat which in turn are responsible to report findings to the international bodies.

I. National Level

The national level Safeguard Specialists will monitor the proper implementation of activities with MER committee that will be drawn from the national REDD+ strategy, MRV and SESA/ESMF task force members. The national level MER body will develop a guideline for the general process of monitoring and evaluation processes that should be followed at different levels and follow up reports coming from the regional level. The MER Committee follows the timely and effective implementation of the impact mitigation measures and provides feedbacks to decision makers. The purpose MER is to demonstrate a pro-poor approach to reducing deforestation and forest degradation at local, national and international levels. The ultimate goal of the follow up by the national MER body is to ensure and provide the evidences to the international body/community about the country's reduced GHG emissions from deforestation and forest degradation following international standards and procedures.

II. Regional Level

Regional Safeguard Specialists and other sectoral safeguard experts employed in their respective regional offices will monitor the effective, efficient and timely implementation of the safeguard instruments. They will be responsible for organizing Woreda level monitoring reports and reporting to the national REDD+ coordination Secretariat. The regional MER will also provide technical support for Woreda REDD+ unit in monitoring the proper implementation of the safeguard instruments.

III. Woreda Level

At Woreda level, depending on the regional specific situation (e.g., Oromia uses the Land Use Planning team), the Woreda REDD+ unit and REDD+ technical committee will be established and be responsible for the day to day monitoring and reporting feedback throughout the whole process of REDD+ and ESMF implementations. They will supervise and review environmental and social safeguard documents and issues during implementation. They will also monitor the environmental and social assessment processes (screening and ESMP preparation), and implementation of the mitigation measures designed. Environmental and social issues during the implementation of the proposed interventions will also be monitored. Moreover, they will organize community level monitoring report and present monitoring reports to the Woreda cabinet.

IV. Community Level

Communities, through their representatives will undertake the implementation and the effects of the monitoring after receiving appropriate trainings. This will be done during planning, implementation and maintenance phase of the sub-project. In the planning stage of the sub-project, community will participate in the identification of indicators for monitoring the mitigating measures and when the sub-project starts they will monitor the implementation of the tasks with respect to environmental and social aspects. The community also participate or conduct monitoring emerging environmental and social risks in relation to the sub-project implementation.

10.3 . Generic safeguard monitoring

It was agreed at the UNFCCC Conference in Cancun in 2010 (COP16) that a set of seven safeguards (Box7, section 4.3 above) should be promoted and supported when undertaking REDD+ activities. The Cancun Agreement and the subsequent Durban Agreement also requested parties implementing REDD+ to provide information on how safeguards are being addressed and respected throughout the implementation of the REDD+ activities. Ethiopia is planning to develop REDD+ Safeguard Information System. The system will have a component of safeguard indicators which will help to ensure whether or not a particular policy, law or regulation is being effectively implemented. The indicators provide the parameters to determine what information needs to be collected.

10.4 Training for Monitoring

The appropriate environmental agency is generally required to monitor the implementation of an authorized project in order to evaluate compliance with all commitments made and obligations imposed on the proponent during authorization. If the proponent does not fulfill these obligations, the agency can order rectifying measures, or can suspend or cancel any authorization to implement a project. Where an unforeseen circumstance is realized only after submission of the EIS, the relevant environmental agency may order the ESIA to be revised or redone so as to address the circumstance. However, in general environmental and social impact monitoring by the relevant stakeholder in Ethiopia is loose due to various reasons including capacity gap and less opportunity of making them involve as well. Thus, in order to monitor effective and efficient implementation of ESMF training need to be given for government environment offices at regional, Woreda and Kebele levels and safeguard specialists of REDD+ on monitoring as it is mentioned in Table18. Making involved different stakeholders identified at all levels and communities in the monitoring and evaluation process in the REDD+ and its safeguards instruments (ESMF, RPF and PF) brings what is desired to be achieved.

10.5 Monitoring Indicators and Responsible Institutions

Monitoring plans will be developed to monitor the proper implementation of mitigation measures for the adverse impacts identified in the project to be implemented.

Table 18: Environmental Risk Mitigation Measures Monitoring indicators for Strategic Options.

Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
SO1: Enhance cross-sectorial synergies and stakeholder participation-	<ul style="list-style-type: none"> Increased deforestation and forest degradation due to absence of full collaboration of sectoral institutes with MEFC (e.g. law enforcement weakness) Less likely collaboration of sectoral institutes for joint planning on forest issues 	<ul style="list-style-type: none"> Coordination unit to be formed at each relevant office, which will check synergy of the sectoral institutes 	<ul style="list-style-type: none"> Presence of Coordination Unit at the respective offices (key ministry offices) 	<ul style="list-style-type: none"> Physical observation of the unit, report 	<ul style="list-style-type: none"> MoANR, MoWIE, MoM, EIA, ERA, EBI, MEFC, EWCA
		<ul style="list-style-type: none"> Assign counterpart (focal person) in each sectoral office that link MEFC with them 	<ul style="list-style-type: none"> Presence of focal persons in each sectoral office 	<ul style="list-style-type: none"> Physical observation, report 	<ul style="list-style-type: none"> MoANR, MoWIE, MoM, EIA, ERA, EBI, MEFC, EWCA
SO2: Forest governance and law enforcement-	<ul style="list-style-type: none"> May bring increased forest degradation from organized illegal cuttings May call for total environmental destruction from mass mobilized cuttings and setting of forest fire 	<ul style="list-style-type: none"> Avail forest products and non-timber forest products which the community depends on the forest from other sources 	<ul style="list-style-type: none"> Shift in use from forest to non-forest products by the community 	<ul style="list-style-type: none"> Physical observation, interview users and suppliers 	<ul style="list-style-type: none"> MEFC, Office of the Attorney General (OAG), Police Commission, (Federal PC, Regional PC),
		<ul style="list-style-type: none"> Share benefit to the community from the income accrued due to the protection of forest 	<ul style="list-style-type: none"> Revenue generated from the protected forest 	<ul style="list-style-type: none"> Interview the beneficiaries, review reports, review vouchers (revenue 	<ul style="list-style-type: none"> MEFC, EBI, MoANR, EWCA, Forest and Wildlife

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
				and payment)	Enterprises (FWEs)
		<ul style="list-style-type: none"> • Increase the awareness of the community through training and education 	<ul style="list-style-type: none"> • Training materials prepared, training offered with evidence of proofing (date, place, signature of trainees and trainers) 	<ul style="list-style-type: none"> • Training report check, interview trainees and trainers, check of the awareness of the community against a given bench mark using questionnaire 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Law enforcement should be in place 	<ul style="list-style-type: none"> • No. of cases filed and decision given 	<ul style="list-style-type: none"> • Report review from the legal department of MEFC, communicate the defaulters 	<ul style="list-style-type: none"> • OAG, FPC, RPC
		<ul style="list-style-type: none"> • Allow community use the resource without cutting the trees e.g. for ritual, cultural practices 	<ul style="list-style-type: none"> • Cultural and spiritual practices kept on being exercised 	<ul style="list-style-type: none"> • Physical observation of the event, interview the community members 	<ul style="list-style-type: none"> • MEFC, EBI, MoANR, EWCA, FWE, MoCT
		<ul style="list-style-type: none"> • Educate and train the community on the value of the forest 	<ul style="list-style-type: none"> • Enhanced knowledge of community on the value of forest 	<ul style="list-style-type: none"> • Before and after training knowledge test of those got education and training 	<ul style="list-style-type: none"> • MEFC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Prepare enough through capacity building (human & material) to suppress fire incase fire is set 	<ul style="list-style-type: none"> • Human and material capacity in place 	<ul style="list-style-type: none"> • Cases of forest fire incident suppressed without causing damage 	<ul style="list-style-type: none"> • MEFC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Empower indigenous 	<ul style="list-style-type: none"> • Presence and 	<ul style="list-style-type: none"> • No. of conflict settled 	<ul style="list-style-type: none"> • OAG, MEFC,

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
		grievance redress mechanisms	exercise of indigenous grievance redressing mechanism in place	using indigenous system (against those settled in formal system)	EBI, MoANR, EWCA, FWE
SO3: Forest tenure and property right	<ul style="list-style-type: none"> • Attractive forest tenure and property right may • Increase land grabbing opportunity • May increase the value of forest land over agriculture land • Disrupts traditional tenure and forest management systems • Change in land use type may be induced (e.g. from agriculture to forest or vice versa) 	<ul style="list-style-type: none"> • Implement effective law enforcement to deter land grabbing 	<ul style="list-style-type: none"> • Presence of land grabbing 	<ul style="list-style-type: none"> • Cases of land grabbed, assessment on land grabbing 	<ul style="list-style-type: none"> • OAG, FPC, RPC
		<ul style="list-style-type: none"> • Government should implement land use planning 	<ul style="list-style-type: none"> • Land use presence per the land use plan and recommendation 	<ul style="list-style-type: none"> • Assessment of lands used out of the land use plan 	<ul style="list-style-type: none"> • MoANR, MEFCC, EIA, EBI
		<ul style="list-style-type: none"> • Synchronize traditional and modern land use system to get the best out of the combination 	<ul style="list-style-type: none"> • Presence of synchronized traditional and modern land use system 	<ul style="list-style-type: none"> • Assessment of land under the synchronized traditional and modern land use system 	<ul style="list-style-type: none"> • MoANR, MEFCC, EIA, FWE, EBI
		<ul style="list-style-type: none"> • Compensation planting required if change is from forest to agricultural lands 	<ul style="list-style-type: none"> • Presence of compensation plantation 	<ul style="list-style-type: none"> • Detection of change in land use type, report review if there is increase in hectare of agriculture production area 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE, MoWIE
SO4: Land use planning	<ul style="list-style-type: none"> • Change in land use type may be induced (e.g. from agriculture to forest or vice versa) 	<ul style="list-style-type: none"> • Compensation planting required if change is from forest to agricultural lands 	<ul style="list-style-type: none"> • Presence of compensation plantation 	<ul style="list-style-type: none"> • Detection of change in land use type, report review if there is increase in hectare of agriculture 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE, MoWIE

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
				production area	
SO5: Ensure Sustainable Forest Management-	<ul style="list-style-type: none"> • Create economically driven forest mismanagement that may lead to forest degradation • May instigate deforestation from marginalized local communities and/or little benefiting PFM members • Low economic value forests in lowland areas may not attract PFM organization • Coffee farming in the forest has already degraded biodiversity and further permit of coffee farming in the forest may worsen the condition • Stakeholder and community may not be mobilized as required 	<ul style="list-style-type: none"> • Hybrid of PFM and Traditional forest management with scientific management so that forests utilized based on forest management plan 	<ul style="list-style-type: none"> • Presence of PFM and Traditional forest hybridized with scientific forest management 	<ul style="list-style-type: none"> • Field assessment; interview community, PFM and REDD+ implementers 	<ul style="list-style-type: none"> • MEFCC, EBI, IFR, MoANR, FWE
		<ul style="list-style-type: none"> • PFM should encompass all community members with equal benefit sharing 	<ul style="list-style-type: none"> • Presence of complaint for exclusion from the PFM membership 	<ul style="list-style-type: none"> • Interview community members, review bylaws of the PFM 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE, IFR
		<ul style="list-style-type: none"> • Enhance the economic value of the lowland forests through forest industry installation 	<ul style="list-style-type: none"> • Presence of industries for the lowland forests 	<ul style="list-style-type: none"> • No. of industries installed 	<ul style="list-style-type: none"> • MEFCC, EBI, IFR, MoANR, FWE
		<ul style="list-style-type: none"> • Strict control over the expansion of coffee planting in the forest 	<ul style="list-style-type: none"> • No new coffee plantation in the forest 	<ul style="list-style-type: none"> • Field assessment, report review 	<ul style="list-style-type: none"> • MoANR, MEFCC, EBI, FWE
		<ul style="list-style-type: none"> • Put in place where the undergrowth and natural regeneration of tree species allowed to grow 	<ul style="list-style-type: none"> • Natural regeneration allowed to grow under plantation 	<ul style="list-style-type: none"> • Field assessment, reported cases of the overtake of plantation by undergrowth or regeneration 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Put in place laws that urges maintenance of minimum number of indigenous tree species where coffee is farmed 	<ul style="list-style-type: none"> • Minimum no. of tree species maintained per recommendations given 	<ul style="list-style-type: none"> • Inventory of the recommended species on in coffee forest 	<ul style="list-style-type: none"> • OAG, MoANR, BoA, MEFCC, EBI, FWE

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Tragedy of the commons 	<ul style="list-style-type: none"> • Build own capacity of fire prevention system 	<ul style="list-style-type: none"> • Human and material capacity in place 	<ul style="list-style-type: none"> • Cases of forest fire incident suppressed without causing damage 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Educate people 	<ul style="list-style-type: none"> • Enhanced knowledge of community on the value of forest 	<ul style="list-style-type: none"> • Before and after training knowledge test of those received education and training 	<ul style="list-style-type: none"> • MoE, MEFCC, EBI, MoANR, EWCA and FWE
		<ul style="list-style-type: none"> • Select appropriate species for the purpose 	<ul style="list-style-type: none"> • Selected species planted 	<ul style="list-style-type: none"> • Field assessment, report 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE, IFR
SO6: Enhancement of forest carbon stock	<ul style="list-style-type: none"> • Quarantined agroforestry species may become invasive and damage the natural environment • May be less effective in cases where mono culture practice more benefits the environment (e.g. in dissected landscapes) • Where the tree and crop or livestock components overlap in their use of resources, competition 	<ul style="list-style-type: none"> • Establish strong quarantine centers at national and all regional government levels 	<ul style="list-style-type: none"> • Functional quarantines available at national and regional levels 	<ul style="list-style-type: none"> • Physical observation, clients interview on the service, incidences and coverage of invasive species decrease 	<ul style="list-style-type: none"> • MoANR, MEFCC, RARIs
		<ul style="list-style-type: none"> • Integrate in the agroforestry system crops with low moisture demand 	<ul style="list-style-type: none"> • Low moisture demanding species integrated in the agroforestry system 	<ul style="list-style-type: none"> • Field assessment, interview of community members 	<ul style="list-style-type: none"> • MoANR, IFR, BoA, MEFCC, EBI, RARIs
		<ul style="list-style-type: none"> • Harvest water during the rainy water for dearth period use 	<ul style="list-style-type: none"> • Water harvesting structure in place 	<ul style="list-style-type: none"> • Interview for the water stress presence during the dearth period 	<ul style="list-style-type: none"> • MoANR, EBI, MEFCC
		<ul style="list-style-type: none"> • Firebreak structure and equipment should be in 	<ul style="list-style-type: none"> • Presence of Firebreak structure 	<ul style="list-style-type: none"> • Field assessment of the structures, 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR,

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	may lead to reduced productivity (e.g. Competition for water between tree and crop components is likely to limit productivity)	place	and equipment	inventory of equipment	EWCA, FWE
	• Aggravate environmental degradation from setting of fires	• Integrate several crops and tree species in the agroforestry practices	• Presence of several crops and tree species in the agroforestry practices	• Field observation of the practice, interview the implementers on the benefit of the integration	• MEFCC, MoANR, IFR, RARIs
	• Aggravate illegal cuttings and destruction of regenerating biodiversity	• Educate and enhance the awareness of community	• Enhanced knowledge of community on the value of forest	• Before and after training knowledge test of those got education and training	• MoE; MEFCC, EBI, MoANR, EWCA and FWE
	• Increase conflict between wildlife & humans & increase crop pests (birds, mammals)	• Fence to exclude encroachment	• Presence of fence	• Field assessment, incidents of encroachment decrease	• MEFCC, EBI, MoANR, EWCA, FWE
	• Risk of monoculture plantation	• Do not come close to the habitat/breeding place of wildlife,	• Injured or death of human or livestock due to close approach to the habitat of wildlife	• Reported case of accident (injury, death) due to wildlife	• EWCA, FWE
	• Compromise to local biodiversity	• Sign boards posted reading prohibition of coming closer to the site	• Presence/absence of sign boards at required sites	• Field observation	• MEFCC, EWCA, FWE,
	• Risk of harbor of crop	• Share benefit from the wildlife hunting/ ecotourism so that community feels ownership over the	• Revenue generated from wildlife hunting/ecotourism	• Interview the beneficiaries, review reports, review vouchers (revenue	• EWCA, FWE

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	pests in reforested area	resource		and payment)	
	<ul style="list-style-type: none"> Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor Poorly designed and mass mobilized conservation measures aggravate soil erosion 	<ul style="list-style-type: none"> Use integrated crop pest management practice 	<ul style="list-style-type: none"> Implementation of the practice 	<ul style="list-style-type: none"> Interview the implementers, field assessment 	<ul style="list-style-type: none"> MoANR, RARIs
		<ul style="list-style-type: none"> Plant mixed species 	<ul style="list-style-type: none"> Presence of mixed species plantation 	<ul style="list-style-type: none"> Field assessment or observation 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Allow natural regeneration under the monoculture species so that the regenerated species overtake the plantation 	<ul style="list-style-type: none"> Natural regeneration allowed to grow under plantation 	<ul style="list-style-type: none"> Field assessment, reported cases of the overtake of plantation by undergrowth or regeneration 	<ul style="list-style-type: none"> MEFCC, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Plant local/indigenous tree species 	<ul style="list-style-type: none"> Absence of planted exotic species 	<ul style="list-style-type: none"> Field observation or assessment of the plantation sites 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Allow natural regeneration under the monoculture species so that the regenerated species overtake the plantation 	<ul style="list-style-type: none"> Natural regeneration allowed to grow under plantation 	<ul style="list-style-type: none"> Field assessment, reported cases of the overtake of plantation by undergrowth or regeneration 	<ul style="list-style-type: none"> MEFCC, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Use integrated crop pest management practice 	<ul style="list-style-type: none"> Implementation of the practice 	<ul style="list-style-type: none"> Interview the implementers, field assessment 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Allow undergrowth through wider space planting 	<ul style="list-style-type: none"> Plantation with wider spacing 	<ul style="list-style-type: none"> Field assessment 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Install soil and water 	<ul style="list-style-type: none"> Soil and water 	<ul style="list-style-type: none"> Field assessment 	<ul style="list-style-type: none"> MEFCC,

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
		conservation practice (physical & biological) to harness erosion	conservation structures in place		MoANR, EWCA, FWE
		• Implement conservation measures using experts/well trained person only	• Conservation structures in place	• Interview community members and experts, assess for the poorly installed conservation measures, assess for failed conservation structures	• MEFCC, EBI, MoANR, EWCA, FWE
		• Enforce land use plan to come into force	• Land use presence per the land use plan and recommendation	• Assessment of lands used out of the land use plan	• MoANR, BoA, EIA, EBI, RARIS
SO7: Agricultural intensification-	<ul style="list-style-type: none"> • Siltation of reservoirs • Fertilizer runoff and leaching; eutrophication and effect on human health • Runoff of pesticides and similar agricultural chemicals • Eroded agricultural genetic resources essential for food security in the future 	• Implement watershed management practice to protect reservoirs	• Watershed management practice in place	• Field assessment, reservoir monitoring for siltation and sedimentation	• MoANR, MEFCC, MoWIE
		• Protect the farmlands with integrated soil & water conservation (biological & physical) measures	• Presence of integrated measures on farm lands	• Field assessment	• MoANR
		• Use of inputs (fertilizers and other chemicals) based on soil and plant tissue analysis for nutrient	• Inputs use in practice	• Laboratory analyses report inspection, report review, land productivity report analyses, interview input suppliers	• MoANR

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Increased pesticides harms animal and human health by accumulating in soils and leaching into water bodies • Stagnation and regimes of underground water • Inadequate drainage and over-irrigation causes water logging • Lowering of water tables • Water diversions for agriculture are a major problem for many aquatic species. 	<ul style="list-style-type: none"> • Treat water before using 	<ul style="list-style-type: none"> • Presence of water treatment plant or chemical 	<ul style="list-style-type: none"> • No health problem case from the use of water sources 	<ul style="list-style-type: none"> • MEFCC, WSSA, MoH,
		<ul style="list-style-type: none"> • Protect farmlands with integrated soil & water conservation (biological & physical) measures 	<ul style="list-style-type: none"> • Presence of integrated soil & water conservation measures on farms 	<ul style="list-style-type: none"> • Farm land assessment, interview implementers 	<ul style="list-style-type: none"> • MoANR, MEFCC, EBI, MoWIE, EWCA, FWE
		<ul style="list-style-type: none"> • Never erode the local genetic resource; work side by side on both local and improved crop varieties to enhance food security 	<ul style="list-style-type: none"> • Presence of both local and improved varieties on uses 	<ul style="list-style-type: none"> • Interview users/implementers 	<ul style="list-style-type: none"> • MoANR, EBI
		<ul style="list-style-type: none"> • Use personal protective equipment whenever applying chemicals 	<ul style="list-style-type: none"> • On duty use of personal protective equipment 	<ul style="list-style-type: none"> • Interview chemical applicators, purchase and dispatch vouchers inspection for personal protective equipment 	<ul style="list-style-type: none"> • MoANR, MEFCC
		<ul style="list-style-type: none"> • Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops 	<ul style="list-style-type: none"> • Animals protected from the farm 	<ul style="list-style-type: none"> • No animal health problem case from grazing/browsing of chemical treated crops 	<ul style="list-style-type: none"> • MoANR
		<ul style="list-style-type: none"> • Continuous leaching of the farms with water 	<ul style="list-style-type: none"> • Presence/absence of salt accumulation in the soil 	<ul style="list-style-type: none"> • Soil test for salinity/alkalinity development, physical/visual observation of 	<ul style="list-style-type: none"> • MoANR

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
				irrigated farms	
		<ul style="list-style-type: none"> Irrigate the farms based on the soil water requirement analysis 	<ul style="list-style-type: none"> Farms irrigate the based on the soil water requirement 	<ul style="list-style-type: none"> Review of the laboratory analyses result 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Use drip irrigation to avoid both under and over irrigating 	<ul style="list-style-type: none"> Presence of installed drip irrigation structure 	<ul style="list-style-type: none"> Field assessment 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Implement practices that recharge ground water (watershed management, soil & water conservation structure) 	<ul style="list-style-type: none"> Implemented watershed management and soil and water conservation structure 	<ul style="list-style-type: none"> Field assessment, water table depth check 	<ul style="list-style-type: none"> MoANR, WSSA, MoWIE
		<ul style="list-style-type: none"> Diversion of water to only the threshold level beyond which aquatic live do not affected 	<ul style="list-style-type: none"> Diversion of water based on ecosystem water balance 	<ul style="list-style-type: none"> Aquatic lives in 	<ul style="list-style-type: none"> MoANR, MoWIE
SO8: Reduce demand for fuel wood and charcoal	<ul style="list-style-type: none"> Increased use of energy efficient stove may indirectly lead to high biomass energy demand and consumption which in turn cause deforestation 	<ul style="list-style-type: none"> Go for alternate energy sources (such as solar, wind, hydropower, geothermal) 	<ul style="list-style-type: none"> Presence of alternate energy sources 	<ul style="list-style-type: none"> Assessment, interview of the users and suppliers 	<ul style="list-style-type: none"> MoWIE, MEFCC
SO9: Increase wood and charcoal supply	<ul style="list-style-type: none"> Exotic species may dominate as these are fast growing than the indigenous Environmental 	<ul style="list-style-type: none"> Researching on fast growing indigenous tree species 	<ul style="list-style-type: none"> Research being carried on fast growing indigenous tree species 	<ul style="list-style-type: none"> Releases of fast growing indigenous tree species 	<ul style="list-style-type: none"> MEFCC, IFR
		<ul style="list-style-type: none"> Employ semi-mechanized system during harvesting 	<ul style="list-style-type: none"> Machines in place 	<ul style="list-style-type: none"> Field observation; interview employees 	<ul style="list-style-type: none"> MEFCC, FWE

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	degradation during harvesting and transporting time			and community	
	<ul style="list-style-type: none"> • Adverse micro-climate modification after harvesting 	<ul style="list-style-type: none"> • Harvest based on the rotation period (do not harvest all at a time) 	<ul style="list-style-type: none"> • Presence of management plan for all forest based on their gestation period 	<ul style="list-style-type: none"> • Review of forest management plan of all sites, field assessment 	<ul style="list-style-type: none"> • MEFCC, FWE
	<ul style="list-style-type: none"> • The act induces more numbers of charcoal users which means more carbon emission 	<ul style="list-style-type: none"> • Sequesterate the emitted carbon by planting trees of environmental value (e.g. for carbon financing, ecosystem protection) 	<ul style="list-style-type: none"> • Presence of forest meant for carbon sequestration 	<ul style="list-style-type: none"> • Field assessment, check if there is utilization of the forest allotted for carbon sequestration 	<ul style="list-style-type: none"> • MEFCC, FWE
	<ul style="list-style-type: none"> • Environmental pollution by particulate matters from the use of charcoal 	<ul style="list-style-type: none"> • Use charcoal gadgets with chimney and lid that prevent entry of particulate into the environment 	<ul style="list-style-type: none"> • Presence of charcoal gadget with chimney and lid 	<ul style="list-style-type: none"> • Household assessment, interview users, clinical data review for problems due to environmental pollution 	<ul style="list-style-type: none"> • MEFCC, MoWIE
	<ul style="list-style-type: none"> • High calorific value wood plantation leads to monoculture that brings about loss in biodiversity 	<ul style="list-style-type: none"> • Allow natural regeneration under the plantation 	<ul style="list-style-type: none"> • Natural regeneration allowed to grow under plantation 	<ul style="list-style-type: none"> • Field assessment, reported cases of the overtake of plantation by undergrowth or regeneration 	<ul style="list-style-type: none"> • MoANR, MEFCC, MoWIE, EBI, EWCA, FWE
	<ul style="list-style-type: none"> • Fire risks from the tree species planted for charcoal production as they are susceptible to ignition 	<ul style="list-style-type: none"> • Have different planation sites for biodiversity and environmental protection 	<ul style="list-style-type: none"> • Presence of separate sites for biodiversity and environmental protection 	<ul style="list-style-type: none"> • Field assessment 	<ul style="list-style-type: none"> • MEFCC, EBI

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
		<ul style="list-style-type: none"> • Construct fire breaks between blocks of forest 	<ul style="list-style-type: none"> • Constructed fire break in place 	<ul style="list-style-type: none"> • Field visit, report review 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, MoANR, FWE
		<ul style="list-style-type: none"> • Build capacity (human and material) to suppress fire in case it sets 	<ul style="list-style-type: none"> • Human and material capacity in place 	<ul style="list-style-type: none"> • Cases of forest fire incident suppressed without causing damage 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, MoANR, FWE
SO10: Improved livestock management-	<ul style="list-style-type: none"> • Solid wastes expected from poultry farm • Nuisance odor expected from poultry farm • Mechanization leads to intensive use of agricultural inputs that results in pollution 	<ul style="list-style-type: none"> • Use wastes for fertilizing soil in farm land 	<ul style="list-style-type: none"> • Organic waste fertilized farms 	<ul style="list-style-type: none"> • Interview, soil sample analyses, trend analyses in amount of inorganic fertilizer supply and use 	<ul style="list-style-type: none"> • MoANR
		<ul style="list-style-type: none"> • Poultry farm to be performed far from the residential areas 	<ul style="list-style-type: none"> • Location of poultry farms 	<ul style="list-style-type: none"> • Field visit of the location of poultry farms 	<ul style="list-style-type: none"> • MEFCC, EIA, MoANR
		<ul style="list-style-type: none"> • Implement the environmental management plan (EMP) recommended in the ESIA of the project whenever available 	<ul style="list-style-type: none"> • Implement the environmental management plan 	<ul style="list-style-type: none"> • Monitoring of the implementation of project environmental management plan 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, MoANR, FWE
		<ul style="list-style-type: none"> • Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any 	<ul style="list-style-type: none"> • Presence/absence of environmental pollution 	<ul style="list-style-type: none"> • Soil and water samples test, clinical data analyses to check if there is problem from soil and water pollution 	<ul style="list-style-type: none"> • MEFCC
SO11: Promote supplementary	<ul style="list-style-type: none"> • Large number and frequent entry into the 	<ul style="list-style-type: none"> • Provide increased access to collect NTFP from the forest 	<ul style="list-style-type: none"> • Complaint from access restriction to 	<ul style="list-style-type: none"> • Interview community members 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA,

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
income generation	forest for NTFP collection affects soil seed bank, regeneration and biodiversity • Fuel wood collection as NTFP affects the carbon stock of the forest • Some NTFP expand at the clearance of forest (e.g. coffee forest of the country) • More number of forest enterprises put the forest under pressure • May aggravate deforestation and forest degradation with the increase of the prices of forest products and NTFP parallel to increase in value chain		the resources		MoANR, FWE
		• Opt for/expand other sources of energy	• Availability of alternate energy sources	• Interview users and suppliers of the alternate energy sources, visit houses of the users of the alternate energy sources	• MoWIE, MEFCC
		• Distribute fuel efficient cooking/baking stoves	• Presence of fuel efficient cooking/baking stoves in houses of community members	• Household visit for the use of fuel efficient cooking/baking stoves, interview of the community members	• MoWIE, MEFCC, MoANR
		• Utilize the forest resource based on the management plan of the source	• Presence of management plan for all forest based on their gestation period	• Review of forest management plan of all sites, field assessment	• MEFCC, FWE
		• Annual increase in volume of the forest must match with the harvest	• Harvest of forest based on mean annual increment (MAI) and management plan	• Check available data for the plantation and utilization year, interview community members for the date of planting and utilization	• MEFCC
		• Marginal profit of the value chain actors to be determined	• Fixed marginal profit set for the actors of the value	• Review of the profit report of the traders	• MoT, MoANR

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
			chain of forest and NFTP		
SO12: Capacity building	<ul style="list-style-type: none"> • Capacity building may only focus on entities that have direct linkage to REDD+ • Soft capacity may not reduce deforestation unless financial and material support is provided 	<ul style="list-style-type: none"> • Inclusion of all relevant experts in the forestry sector at different levels 	<ul style="list-style-type: none"> • Complaint from the non-included in capacity building 	<ul style="list-style-type: none"> • Interview of those working on forest other than REDD+, review of reports on capacity building 	<ul style="list-style-type: none"> • MEFCC
		<ul style="list-style-type: none"> • Capacity support should include facilities and financial support to forest sector offices 	<ul style="list-style-type: none"> • Capacitated (financial and facility) forest sector offices 	<ul style="list-style-type: none"> • Visit of the forest sector offices, interview f staffs 	<ul style="list-style-type: none"> • MEFCC
SO13: Inter-sectoral coordination on planning and implementation-	<ul style="list-style-type: none"> • Lingering decision making process may result in further destruction of forest resources • Inaction may weaken law enforcement and cause loose control over uncontrolled extraction 	<ul style="list-style-type: none"> • Put in place a workable mechanism that facilitates with checks and balance in making timely decisions 	<ul style="list-style-type: none"> • Presence of enabling decision making mechanism 	<ul style="list-style-type: none"> • Interview decision makers and customers/clients, review of cases decided and yet on the shelf waiting decision 	<ul style="list-style-type: none"> • MECFF, MoANR, EIA
		<ul style="list-style-type: none"> • Increased accountability and transparency in the decision making process 	<ul style="list-style-type: none"> • Timely decision made 	<ul style="list-style-type: none"> • Review no. of cases that got decision and yet on shelf undecided, analyses of the root causes for the decision delay or not made 	<ul style="list-style-type: none"> • MEFCC, FAG, OAG
SO14: Demand-driven Research and extension linkage	<ul style="list-style-type: none"> • High priority environmental issues may be neglected 	<ul style="list-style-type: none"> • Research needs identification and prioritization should be carried 	<ul style="list-style-type: none"> • Research issues identified and prioritized 	<ul style="list-style-type: none"> • No. of implemented prioritized research issues 	<ul style="list-style-type: none"> • MEFCC

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Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Research results may not lead to action on the ground 	<ul style="list-style-type: none"> • Academics and forestry sector experts should work together to apply research outputs 	<ul style="list-style-type: none"> • Research outputs being implemented 	<ul style="list-style-type: none"> • Review of report on the research findings, new 	<ul style="list-style-type: none"> • MoE, MEFCC, IFR
SO15: Ensure full participation and equitable benefit for women	<ul style="list-style-type: none"> • Loss of cultural, medicinal, etc. value species may occur while disregarding others than women 	<ul style="list-style-type: none"> • Allow all community segments (men & women, youth & elders, etc.) contribute available knowledge for the management of the natural resource 	<ul style="list-style-type: none"> • Participation of all community members for the management of the natural resource 	<ul style="list-style-type: none"> • Interview community members 	<ul style="list-style-type: none"> • MEFCC
SO16: Benefit sharing	<ul style="list-style-type: none"> • REDD+ implementation may result in more deforestation and forest degradation if it carries cost to the community 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation 	<ul style="list-style-type: none"> • Revenue generating activities devised and implemented 	<ul style="list-style-type: none"> • Amount of income generated from the REDD+ implementation, community members interview 	<ul style="list-style-type: none"> • MEFCC
	<ul style="list-style-type: none"> • Late recognizer of the benefit of the REDD+ project may adversely affect the REDD+ project forest 	<ul style="list-style-type: none"> • Give opportunity for the late adopters to become the member and enjoy the benefit 	<ul style="list-style-type: none"> • Complaint on benefit sharing 	<ul style="list-style-type: none"> • Interview of community members 	<ul style="list-style-type: none"> • MEFCC

Table 19: Social Risks Mitigation Measures Monitoring indicators for Strategic Options.

Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
SO1: Enhance cross-sectorial synergies and stakeholder participation	<ul style="list-style-type: none"> Inefficient social service from the sectoral office due to absence or little synergy 	<ul style="list-style-type: none"> Enhance synergy 	<ul style="list-style-type: none"> Absence or presence of synergy among sectoral offices 	<ul style="list-style-type: none"> Interview staffs and customers of the sectoral offices for service satisfactions, evaluate performance of duties that need synergy 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Develop customer reporting system for the inefficient service from each sectoral services 	<ul style="list-style-type: none"> Complaint from customer for inefficient service from each sectoral services 	<ul style="list-style-type: none"> Interview customer, review report on availability of synergy 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
SO2: Forest governance and law enforcement	<ul style="list-style-type: none"> Restriction over livestock pasture resource 	<ul style="list-style-type: none"> Let the community use grass in cut and carry system 	<ul style="list-style-type: none"> Community uses grass in cut and carry system 	<ul style="list-style-type: none"> Interview community members 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> Restriction over expansion of farmlands 	<ul style="list-style-type: none"> Intensify productivity per unit area through improved input use so that areal expansion of agriculture land halt 	<ul style="list-style-type: none"> Increased productivity, Increased use of agriculture inputs, no lateral expansion of agricultural land 	<ul style="list-style-type: none"> Report review on productivity, interview of input suppliers and users, land cover land use change analysis 	<ul style="list-style-type: none"> MoANR
	<ul style="list-style-type: none"> Restriction over fuel, construction and farm implement forest resources 	<ul style="list-style-type: none"> Supply improved cooking and baking stoves to the community which depends on forest for energy source 	<ul style="list-style-type: none"> Availability and use of improved cooking and baking stoves by community 	<ul style="list-style-type: none"> Interview of improved cooking and baking stoves suppliers and users 	<ul style="list-style-type: none"> MoWIE, MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> Conflict between 	<ul style="list-style-type: none"> Materialize the second phase growth and 	<ul style="list-style-type: none"> Implementation of GTP 2. 	<ul style="list-style-type: none"> Report review on the achievements of 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA,

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	local communities	transformation plan (GTP) of Ethiopia that gives due emphasize to renewable energy sources		GTP2, field assessment of the physically implemented activities	FWE
	<ul style="list-style-type: none"> • and protecting agents • Restriction over member of communities that traditionally use the forest for religious rituals 	<ul style="list-style-type: none"> • Shift from wood to metal and/or blocks for construction 	<ul style="list-style-type: none"> • Availability of alternates for forest product and NTFP 	<ul style="list-style-type: none"> • Interview users & suppliers for the availability of alternates for forest product and NTFP. Trend analyses for alternates for forest product and NTFP 	<ul style="list-style-type: none"> • MoUHD, MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> • Obstruction of routes that connect communities living on either sides of the forest 	<ul style="list-style-type: none"> • Ploughing system shift from traditional to semi-mechanized 	<ul style="list-style-type: none"> • Shift in farming system 	<ul style="list-style-type: none"> • Assessment to identify shift in farming system, interview of community members 	<ul style="list-style-type: none"> • MoANR, RARIs
	<ul style="list-style-type: none"> • Hosts wild animals that may frequently attack livestock of surrounding communities 	<ul style="list-style-type: none"> • Use customary conflict redress mechanism 	<ul style="list-style-type: none"> • Presence and exercise of indigenous grievance redressing mechanism in place 	<ul style="list-style-type: none"> • No. of conflict settled using indigenous system (against those settled in formal system) 	<ul style="list-style-type: none"> • MEFCC
	<ul style="list-style-type: none"> • Strong institutions may override community based institutes that protected forest for 	<ul style="list-style-type: none"> • Enhance the benefit of the community from the enclosed area 	<ul style="list-style-type: none"> • Presence of complaint on benefit share by community 	<ul style="list-style-type: none"> • Interview community members, review national laws and community bylaws on benefit scheme 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Compensate them enough 	<ul style="list-style-type: none"> • Presence of complaint on 	<ul style="list-style-type: none"> • Interview affected community or their 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA,

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	centuries		compensation	members on the compensation made, compensation voucher assessment	FWE
		<ul style="list-style-type: none"> • Allow communities to practice the ritual and religious practices in the forest as far as these do not affect the forest 	<ul style="list-style-type: none"> • Cultural and spiritual practices kept on being exercised 	<ul style="list-style-type: none"> • Physical observation of the event, interview the community members 	<ul style="list-style-type: none"> • MoCT, MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Area enclosure should leave access routes for communities to move freely 	<ul style="list-style-type: none"> • Presence of access routes for community movement 	<ul style="list-style-type: none"> • Field observation, interview affected community or their members 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • If obstruction of access route is must, transport facility to use the other route must be arranged 	<ul style="list-style-type: none"> • Presence of new access route and transport facility 	<ul style="list-style-type: none"> • Field observation, interview affected community or their members 	<ul style="list-style-type: none"> • ERA, MEFCC, EBI, MoANR, FWE
		<ul style="list-style-type: none"> • Maintain wildlife to the ecological threshold level 	<ul style="list-style-type: none"> • Presence of population of wildlife at ecological threshold level 	<ul style="list-style-type: none"> • Wildlife census 	<ul style="list-style-type: none"> • EWCA, MEFCC, EBI, MoANR, FWE
		<ul style="list-style-type: none"> • Compensate the individual whose livestock eaten by the wildlife 	<ul style="list-style-type: none"> • Complaint for absence or little payment of compensation for wildlife eaten livestock 	<ul style="list-style-type: none"> • Interview of the affected community members 	<ul style="list-style-type: none"> • EWCA, MEFCC, EBI, MoANR, FWE
		<ul style="list-style-type: none"> • Equally strengthen CBOs as that of government 	<ul style="list-style-type: none"> • Availability of strong CBOs 	<ul style="list-style-type: none"> • Capacity assessment of CBOs 	<ul style="list-style-type: none"> • MEFCC, FWE, EWCA

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
		institutes			
SO3: Forest tenure and property right	<ul style="list-style-type: none"> • Small holder farmers may be evicted from their holdings for forest investment • Loss in land ownership may be induced (e.g. from private to government or vice versa) • Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest 	<ul style="list-style-type: none"> • Organize community in CBO/PFM and let them have their own forest 	<ul style="list-style-type: none"> • Presence of CBO/PFM owned forest 	<ul style="list-style-type: none"> • Report assessment, forest ownership inventory, interview CBO/PFM members 	<ul style="list-style-type: none"> • MEFCC, EBI, FWE, EWCA
		<ul style="list-style-type: none"> • Compensate enough both in kind and other means 	<ul style="list-style-type: none"> • Presence of complaint on compensation 	<ul style="list-style-type: none"> • Interview affected community/their members, assess compensation documents or vouchers 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Compensate enough both in kind and other means 	<ul style="list-style-type: none"> • Presence of complaint on compensation 	<ul style="list-style-type: none"> • Interview affected community/their members, assess compensation documents or vouchers 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
SO4: Land use planning	<ul style="list-style-type: none"> • Loss in land ownership may be induced (e.g. from private to government or vice versa) • Coffee forest farmers may be affected by the change of the 	<ul style="list-style-type: none"> • Compensate enough both in kind and other means 	<ul style="list-style-type: none"> • Presence of complaint on compensation 	<ul style="list-style-type: none"> • Interview affected community/their members, assess compensation documents or vouchers 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	forested coffee to pure stand of forest				
SO5: Ensure Sustainable Forest Management-	<ul style="list-style-type: none"> Interventions of PFM are prone for any physical damage since it does not have legal support under Ethiopian law 	<ul style="list-style-type: none"> PFM need to be supported by legal framework through promulgating new policy 	<ul style="list-style-type: none"> Presence of legal framework promulgated to encourage PFM 	<ul style="list-style-type: none"> Issued legal framework promulgated that encourage PFM 	<ul style="list-style-type: none"> OAG, MEFCC, EBI, EWCA, FWE
		<ul style="list-style-type: none"> Educate and train communities in the lowland areas about PFM 	<ul style="list-style-type: none"> Presence of education and training 	<ul style="list-style-type: none"> Assess awareness/knowledge of lowland community on PFM 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> PFM experiences in Ethiopia is mainly in a high forest; this may have negative impact to adapt in low land woodland areas where there are different socio-economic and ecological conditions 	<ul style="list-style-type: none"> Assist communities in the low land areas to carry-out experience sharing visit in high land area 	<ul style="list-style-type: none"> Presence of experience sharing between the low land and highland communities 	<ul style="list-style-type: none"> Interview of the community members if experience sharing were given 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> Encourage self dependency of the PFM groups through enabling them generate their own income from the forest management activities 	<ul style="list-style-type: none"> Presence of self dependent PFM 	<ul style="list-style-type: none"> Assess the capacity of the PFM, assess the revenue report of the PFM 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE, SMEA
	<ul style="list-style-type: none"> Creates dependency syndrome on local communities because of long term incentivization by implementing 	<ul style="list-style-type: none"> All the communities members should become PFM members 	<ul style="list-style-type: none"> Community members being the member of PFM 	<ul style="list-style-type: none"> Assessment to identify non-members of the PFM 	<ul style="list-style-type: none"> MEFCC, EBI, FWE,
		<ul style="list-style-type: none"> The PFM bylaw and the legal framework should define the power of the PFM leaders 	<ul style="list-style-type: none"> Presence of legal and bylaw that define the power of PFM leaders 	<ul style="list-style-type: none"> Assess the bylaw of PFM 	<ul style="list-style-type: none"> MEFCC, EBI, FWE, FCPA, OAG
		<ul style="list-style-type: none"> The leaders should be sued 	<ul style="list-style-type: none"> Presence of reported 	<ul style="list-style-type: none"> No. of decision made 	<ul style="list-style-type: none"> OAG, RPC, FPC

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	projects to protect the resource	in case of default	cases of defaulter on PF leaders	on PFM leader defaulters based on PFM bylaw and/or court	
	<ul style="list-style-type: none"> • Conflict over benefit sharing and marginalization of certain segments of local community 	<ul style="list-style-type: none"> • Equal access rights to all members of the community need to be granted 	<ul style="list-style-type: none"> • Complaint on unequal access rights to natural resource 	<ul style="list-style-type: none"> • Interview of affected members 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> • Conflict over skewed power relationship • PFM may involve the exclusion of previous forest users from accessing forest resources 	<ul style="list-style-type: none"> • The PFM bylaw should ensure access to all community members 	<ul style="list-style-type: none"> • Complaint on unequal access rights to natural resource 	<ul style="list-style-type: none"> • Assess the bylaw of PFM 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, FWE
SO6: Enhancement of forest carbon stock	<ul style="list-style-type: none"> • Highly fragment land use types of an individual household and may end up in highly reduced products 	<ul style="list-style-type: none"> • Increase productivity per unit area through improved input use (seed, fertilizer, etc.). 	<ul style="list-style-type: none"> • Inputs use in practice 	<ul style="list-style-type: none"> • land productivity report analyses, interview input users and suppliers 	<ul style="list-style-type: none"> • MoANR
	<ul style="list-style-type: none"> • Difficult to introduce due to long gestation period of the trees 	<ul style="list-style-type: none"> • Integrate several types of agroforestry crops and trees to get increased products from diversified crops and trees 	<ul style="list-style-type: none"> • Presence of agroforestry system that integrate multiple trees and crops 	<ul style="list-style-type: none"> • Field assessment, land cover land use types analysis 	<ul style="list-style-type: none"> • MoANR, MEFCC, FWE
		<ul style="list-style-type: none"> • Opt for fast growing tree species 	<ul style="list-style-type: none"> • Presence of planted fast growing tree 	<ul style="list-style-type: none"> • Research report on the release of fast 	<ul style="list-style-type: none"> • MEFCC, FWE, RARIs, IFR

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Traditional monoculture farming system • Intensive care for the various agroforestry practices consumes the time and energy of household members 		species	growing tree species, interview the tree growing community members	
		<ul style="list-style-type: none"> • Research centers should work on improving (shortening) of the long gestation period of local tree species 	<ul style="list-style-type: none"> • Improved and short gestation period tree species release 	<ul style="list-style-type: none"> • Research report review, interview research result users 	<ul style="list-style-type: none"> • RARIs, IFR
	<ul style="list-style-type: none"> • Physical relocation of local communities • Restriction over livestock pasture resource 	<ul style="list-style-type: none"> • The agroforestry system should integrate at least 2 and above 2 tree species with other crops 	<ul style="list-style-type: none"> • Presence of the agroforestry practice 	<ul style="list-style-type: none"> • Field assessment 	<ul style="list-style-type: none"> • MoANR, MEFCC, EBI, IFR
		<ul style="list-style-type: none"> • The household should manage the size of the land that can be managed by the family members 	<ul style="list-style-type: none"> • Availability of land managed by the family size or no land left unmanaged due to family labour shortage 	<ul style="list-style-type: none"> • Field assessment during active land management season, interview of landowner/household head 	<ul style="list-style-type: none"> • MoANR
	<ul style="list-style-type: none"> • Restriction over expansion of farmlands • Conflict between 	<ul style="list-style-type: none"> • Use mechanized/ improved technology for forest harvesting for resource saving reason 	<ul style="list-style-type: none"> • Presence of mechanized/ improved technology 	<ul style="list-style-type: none"> • Interview of the users of the technology, field assessment 	<ul style="list-style-type: none"> • MEFCC, FWE
		<ul style="list-style-type: none"> • Compensate in kind or other means 	<ul style="list-style-type: none"> • Presence of complaint on compensation 	<ul style="list-style-type: none"> • Interview of affected community or their members 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Use cut and carry system 	<ul style="list-style-type: none"> • Presence of cut and carry system 	<ul style="list-style-type: none"> • Interview of affected community or their members and 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	local communities and protecting agents			administrator of the access restricted site	
	<ul style="list-style-type: none"> • Obstruction of routes that use to connect communities living on either sides of area closure • High costs of seedling production to carry out plantation relative to enrichment plantings • Brings loss of economic benefits • Create access restriction for resource utilizations • Create land computation with local community 	<ul style="list-style-type: none"> • Proportionate the number of livestock with the available resource amount 	<ul style="list-style-type: none"> • Balanced no. of livestock with the available resource for them 	<ul style="list-style-type: none"> • Assess if livestock are overstocked 	<ul style="list-style-type: none"> • MoANR
		<ul style="list-style-type: none"> • Intensify productivity per unit area through improved input use so that areal expansion of agriculture land halt 	<ul style="list-style-type: none"> • Increased productivity, Increased use of agriculture inputs, no lateral expansion of agricultural land 	<ul style="list-style-type: none"> • Report review on productivity, interview of input suppliers and users, land cover land use change analysis 	<ul style="list-style-type: none"> • MoANR
		<ul style="list-style-type: none"> • Use customary conflict redress mechanism 	<ul style="list-style-type: none"> • Presence and exercise of customary grievance redressing mechanism 	<ul style="list-style-type: none"> • No. of conflict settled using customary system (against those settled in formal system) 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Enhance the benefit of the community from the enclosed area 	<ul style="list-style-type: none"> • Presence of complaint on benefit share by community 	<ul style="list-style-type: none"> • Interview community members, review national laws and community bylaws on benefit scheme 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Compensate them enough 	<ul style="list-style-type: none"> • Presence of complaint on compensation 	<ul style="list-style-type: none"> • Interview affected community or their members on the compensation made, compensation voucher assessment 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Area enclosure should 	<ul style="list-style-type: none"> • Presence of access 	<ul style="list-style-type: none"> • Field observation, 	<ul style="list-style-type: none"> • MEFCC, EBI,

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Can prevent human and livestock mobility • From previous experience of large scale plantation people feel fear of loss of land ownership • Fire is a concerns that fire will increase and could affect neighboring properties • Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest 	leave access routes for communities to move freely	routes for community movement	interview affected community or their members	MoANR, EWCA, FWE
		• If obstruction of access route is must, transport facility to use the other route must be arranged	• Presence of new access route and transport facility	• Field observation, interview affected community or their members	• ERA, MEFCC, EBI, MoANR, EWCA, FWE
		• Subsidize the seedling production cost through support by NGOs operating in the area	• Presence of subsidized seedlings	• Interview of community members and staffs of NGOs enjoying and providing subsidy on seedlings respectively	• MEFCC, EBI, MoANR, EWCA, FWE
		• Collect seed from local sources and raise them in community owned nursery	• Seedlings growing in community nursery	• Interview of community members	• MEFCC, EBI, MoANR, EWCA, FWE
		• Compensate for what the community will lose from the land that to be devoted to reforestation/ afforestation	• Presence of complaint on compensation	• Interview of community members	• MEFCC, EBI, MoANR, EWCA, FWE
		• Ensure benefit sharing from the reforestation/ afforestation through their active involvement in the activities	• Presence of complaint on benefit share by community	• Interview community members, review national laws and community bylaws on benefit scheme	• MEFCC, EBI, MoANR, EWCA, FWE
		• Allow cut and carry practice for the grass use	• Community uses grass in cut and carry system	• Interview community members	• MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	floor.	<ul style="list-style-type: none"> • Allow the utilization of NTFP 	<ul style="list-style-type: none"> • Complaint from access restriction to the resources 	<ul style="list-style-type: none"> • Interview community members 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, MoANR, FWE
		<ul style="list-style-type: none"> • Implement reforestation/afforestation on land with no competing interest (e.g. previously forested land or marginalized land) with the community 	<ul style="list-style-type: none"> • Presence of community complaint on land use competition with them 	<ul style="list-style-type: none"> • Interview community members 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Reforestation/afforestation should leave access routes for communities to move freely 	<ul style="list-style-type: none"> • Presence of access routes for community movement 	<ul style="list-style-type: none"> • Field observation, interview affected community or their members 	<ul style="list-style-type: none"> • MEFCC, MoANR, EBI, EWCA, FWE
		<ul style="list-style-type: none"> • If obstruction of access route is must, transport facility to use the other route must be arranged 	<ul style="list-style-type: none"> • Presence of new access route and transport facility 	<ul style="list-style-type: none"> • Field observation, interview affected community or their members 	<ul style="list-style-type: none"> • ERA, MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Legally confirm them the forest to be developed on their own land finally belongs to them 	<ul style="list-style-type: none"> • Presence of complaint of loss of ownership of forest grown by the community themselves 	<ul style="list-style-type: none"> • Interview affected community 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Do not plant fire prone tree species 	<ul style="list-style-type: none"> • Presence of fire prone tree species 	<ul style="list-style-type: none"> • Forest type inventory 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Plant mixed species to minimize the risk of fire setting naturally or 	<ul style="list-style-type: none"> • Presence of plantation of mixed tree species 	<ul style="list-style-type: none"> • Forest inventory 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
		deliberately			
		<ul style="list-style-type: none"> • Train the community on forest fire risk and forest fire management 	<ul style="list-style-type: none"> • Presence of trained human resource o fire risk and management 	<ul style="list-style-type: none"> • Cases of forest fire incident suppressed without causing damage by the trained human resources 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Construction fire break line between the forest and the properties of the community 	<ul style="list-style-type: none"> • Presence of fire break line between the forest and the properties of the community 	<ul style="list-style-type: none"> • Field assessment 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Get prepared for suppressing fires though availing fires suppressing tools and equipment 	<ul style="list-style-type: none"> • Presence of forest fire suppressing tools and equipment 	<ul style="list-style-type: none"> • Cases of forest fire incident suppressed without causing damage using available tools and equipment 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Plant with wider spacing to allow undergrowth so that erosion will be prevented or minimal 	<ul style="list-style-type: none"> • Presence of undergrowth that suppress erosion 	<ul style="list-style-type: none"> • Field assessment to identify the growth of undergrowth and incidence of erosion 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Empower women and youth to play the role 	<ul style="list-style-type: none"> • Presence of empowered women and youth 	<ul style="list-style-type: none"> • Interview women and youth 	<ul style="list-style-type: none"> • WCAO, MEFCC, EBI, MoANR, EWCA, FWE
SO7: Agricultural intensification-	<ul style="list-style-type: none"> • Create farmers to depend on agricultural inputs like fertilizer 	<ul style="list-style-type: none"> • Encourage agriculture intensification by the use of compost than chemical fertilizer especially for 	<ul style="list-style-type: none"> • Presence of compost fertilized farms 	<ul style="list-style-type: none"> • Interview, soil sample analyses, trend analyses in amount of inorganic fertilizer 	<ul style="list-style-type: none"> • MoANR

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides • affects human health due to agricultural chemicals • Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women • Limited purchasing capacity of inputs (improved seeds, fertilizers seedlings) can limit potential gains 	smallholder farmers <ul style="list-style-type: none"> • Use integrated pest management system which proved best than single types of pest management practice 	<ul style="list-style-type: none"> • Implementation of the practice 	supply and use <ul style="list-style-type: none"> • Interview the field implementers, assessment 	<ul style="list-style-type: none"> • MoANR, MEFCC, EBI, EWCA, FWE
		<ul style="list-style-type: none"> • Give awareness creation on health and safety of agro-chemicals 	<ul style="list-style-type: none"> • Presence of aware community on health and safety of agro-chemicals 	<ul style="list-style-type: none"> • Interview of affected community members, clinical data review for problems due to agro-chemicals 	<ul style="list-style-type: none"> • MoANR, MoH
		<ul style="list-style-type: none"> • Use of PPE whenever applying agro-chemicals 	<ul style="list-style-type: none"> • On duty use of personal protective equipment 	<ul style="list-style-type: none"> • Interview chemical trend analyses on the supply and sales of PPE 	<ul style="list-style-type: none"> • MEFCC, EBI, ECA, MoANR, FWE
		<ul style="list-style-type: none"> • Offer continued and sustained education & awareness creation on the appropriate use of chemical 	<ul style="list-style-type: none"> • Presence of aware community on appropriate use of chemicals 	<ul style="list-style-type: none"> • Interview of affected community members, clinical data review for problems due to inappropriate use of chemicals 	<ul style="list-style-type: none"> • MoANR, MoH
		<ul style="list-style-type: none"> • Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers 	<ul style="list-style-type: none"> • Presence of subsidized farmers on agriculture intensification 	<ul style="list-style-type: none"> • Interview of the beneficiaries of subsidy, assessment of introduced agriculture technology 	<ul style="list-style-type: none"> • MoANR

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> Climate smart agriculture (CSA) sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively Only rich farmers may benefit from CSA Prevalence of water-borne diseases (giardia, schistosomiasis, etc.) may increase Increased exposure to malaria Shortage or lack of water resource to 	<ul style="list-style-type: none"> Educate and train community on the benefit of CSA 	<ul style="list-style-type: none"> Presence of aware community on CSA 	<ul style="list-style-type: none"> Assess awareness/knowledge of community on CSA 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Assist poor farmers technically and materially 	<ul style="list-style-type: none"> Presence of technically and materially assisted farmers 	<ul style="list-style-type: none"> Interview of beneficiaries, assess the skill/knowledge acquired & material support given 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Educate and give sustainable training to the community on water and sanitation including water borne diseases 	<ul style="list-style-type: none"> Presence of aware community on water & sanitation and waterborne diseases 	<ul style="list-style-type: none"> Interview of affected community members, clinical data assessment for water borne disease prevalence 	<ul style="list-style-type: none"> MoH, WSSA
		<ul style="list-style-type: none"> Enhance health facility for the treatment of water borne diseases if these are inevitably occurring 	<ul style="list-style-type: none"> Health facility presence for treating of waterborne diseases, 	<ul style="list-style-type: none"> Assessment for the physical presence and functionality of health facilities, interview of community members on the service provided 	<ul style="list-style-type: none"> MoH
		<ul style="list-style-type: none"> Avoid water logging through adequately draining 	<ul style="list-style-type: none"> Drainage structure availability 	<ul style="list-style-type: none"> Assessment for the presence of the drainage structure, interview of community members on the service provided 	<ul style="list-style-type: none"> MoH, WSSA
		<ul style="list-style-type: none"> Disturb stagnant water 	<ul style="list-style-type: none"> No or little 	<ul style="list-style-type: none"> Interview of 	<ul style="list-style-type: none"> MoH, WSSA

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	downstream users • Conflicts between neighboring communities over water resource utilization	continuously to break the breeding/life cycle of the insect	prevalence of insects	community members on the prevalence of insects, clinical data assessment for insect bite diseases	
		• Cater mosquito net to the community	• Availability of distributed mosquito net	• Interview of community members on distribution of mosquito net, clinical data assessment for malaria prevalence, assessment of the availability of mosquito net in the community	• MoH
		• Implement wise and fair use of water	• Presence of wise and fair use of water	• Interview community members, check for the water meter readings	• MoWIE, WSSA
		• Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community	• Conflict on water use between the upper and lower water user community members	• Assess no. of cases reported on water use conflict, interview community members for the root causes of conflict	• MoWIE
		• Harvest excessive water during the high moisture seasons for the later dearth period use	• Water harvesting structure in place	• Interview for the water stress presence during the dearth period	• MoANR, MoWIE
		• Water use to be	• Conflict on water use	• Assess no. of cases	• MoWIE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
		implemented based on the schedule to be fixed by the consent of the upper and lower community	between the upper and lower water user community members	reported on water use conflict, interview community members for the root causes of conflict	
SO8: Reduce demand for fuel wood and charcoal	<ul style="list-style-type: none"> • Incur cost to poor local communities • Difficult to adopt the technology due to cultural barriers (e.g. Preference of open over closed stoves for fumigation reasons) • Difficult to adopt the technology in abundant forest resource areas • May be difficult to supply energy efficient cooking stoves, biogas and electricity over short period of time • May be difficult to supply the stoves in 	• Supply of energy efficient cooking and baking gadgets at subsidized price	• Availability and use of subsidized improved cooking and baking stoves	• Interview of improved cooking and baking stoves suppliers and users	• MoWIE, MEFCC, EBI, MoANR, EWCA, FWE
		• Avail electricity at affordable price by the community	• Availability and electricity at affordable price	• Interview users of electricity, assess electricity users and non-users	• EESA
		• Encourage farmers build corrugated/bricks roof house over hatch house so that there will be no fumigation	• Prevalence of constructed and to be constructed corrugated/ bricks roof house	• Assessment in the forest areas, review of report of Central Statistical Authority of Ethiopia	• MoUDH, MEFCC, EBI, MoANR, EWCA, FWE
		• Educate and enhance the awareness of the community on modern style of living	• People living modern life style	• Assess for the improvement of living standards	• MEFCC, MoE
		• Educate and give sustained training on the relative advantage of electricity/fuel efficient stove over the traditional stove	• Presence of aware community who distinguish drawbacks and advantage of the different types of energy types	• Assess community members who dwell on traditional stoves after educating/training, interview beneficiaries and suppliers on sales of	• MoWIE, EESA

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	high demand areas due to long production-marketing chain			electricity/fuel efficient stoves	
	<ul style="list-style-type: none"> • Stoves in high demand areas due to long production-marketing chain 	<ul style="list-style-type: none"> • Avail electricity and cooking/baking stoves at very attractive price 	<ul style="list-style-type: none"> • Increased no. of users of cooking/baking stoves 	<ul style="list-style-type: none"> • Assessment of the users and non-users of cooking/baking stoves 	<ul style="list-style-type: none"> • MoWIE, MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> • Exploitation by middle men in the market chain 	<ul style="list-style-type: none"> • Solicit fund for the soonest project implementation e.g. fuel efficient cooking/baking stoves catering 	<ul style="list-style-type: none"> • Availability/utilization of fund for fuel efficient cooking/baking stoves catering 	<ul style="list-style-type: none"> • Assess if projects are being implemented by solicited funds 	<ul style="list-style-type: none"> • MoWIE, MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> • Time taking: long awareness creation and technology adoption process 	<ul style="list-style-type: none"> • Begin with the few number of farmers and gradually increase it 	<ul style="list-style-type: none"> • Increased no. of users of. fuel efficient cooking/baking stoves over times 	<ul style="list-style-type: none"> • Trend analyses of the users of fuel efficient cooking/baking stoves over times 	<ul style="list-style-type: none"> • MoWIE, MEFCC, FWE
		<ul style="list-style-type: none"> • Build the capacity of community members for own community demand making of the stoves 	<ul style="list-style-type: none"> • Community who produce fuel efficient stove for own use 	<ul style="list-style-type: none"> • Assess no. of fuel efficient stove produce and distributed for own community use 	<ul style="list-style-type: none"> • MoWIE, MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Begin with the few number of farmers and gradually increase it 	<ul style="list-style-type: none"> • Increased no. of users of. fuel efficient cooking/baking stoves over times 	<ul style="list-style-type: none"> • Trend analyses of the users of fuel efficient cooking/baking stoves over times 	<ul style="list-style-type: none"> • MoWIE, MEFCC, FWE
SO9: Increase wood and charcoal supply	<ul style="list-style-type: none"> • Market problem may be a challenge 	<ul style="list-style-type: none"> • Look potential local and oversea market for forest products 	<ul style="list-style-type: none"> • Presence of market for forest products 	<ul style="list-style-type: none"> • Interview suppliers of forest products 	<ul style="list-style-type: none"> • MEFCC, FWE
	<ul style="list-style-type: none"> • High transport, operation and 	<ul style="list-style-type: none"> • improve road network in the coming GTP2 years 	<ul style="list-style-type: none"> • Improved road network 	<ul style="list-style-type: none"> • Report review, road network analysis 	<ul style="list-style-type: none"> • ERA

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<ul style="list-style-type: none"> • maintenance costs and the length of time it takes to reach commercial centers • May brings food insecurity as farm lands devoted to plantation • Labor may be a problem for the family to harvest the forest products • Transporting to the market center may be a problem due to farmers' financial capacity • Loss of livestock due to communal land (such as grazing lands) allocation for tree 	<ul style="list-style-type: none"> • Create wood market centers at optimum distance from the plantation area 	<ul style="list-style-type: none"> • Presence of market centers at optimum distance from the plantation area 	<ul style="list-style-type: none"> • Assessment for the presence of market centers 	<ul style="list-style-type: none"> • MEFCC, FWE
		<ul style="list-style-type: none"> • Transport food from surplus production area 	<ul style="list-style-type: none"> • No food shortage in production deficit areas 	<ul style="list-style-type: none"> • Interview community members in production deficit areas if supplied from surplus area, interview suppliers 	<ul style="list-style-type: none"> • MoANR, MoH
		<ul style="list-style-type: none"> • Incorporate NTFP (such as honey) in the system 	<ul style="list-style-type: none"> • Inclusion of NTFPs in the forestry system 	<ul style="list-style-type: none"> • Field assessment, interview of community that benefited from the system 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Hand operated simple machine catering to tree farmers at subsidized price 	<ul style="list-style-type: none"> • Presence of hand operated tree machines 	<ul style="list-style-type: none"> • Interview tree farmers and suppliers of the machines 	<ul style="list-style-type: none"> • MEFCC, FWE
		<ul style="list-style-type: none"> • Organize in CBO and pull the resource together to solve financial problem 	<ul style="list-style-type: none"> • Presence of financial constraints in CBOs 	<ul style="list-style-type: none"> • Interview CBO members 	<ul style="list-style-type: none"> • FCPA, MEFCC, FWE
		<ul style="list-style-type: none"> • Encourage tree plantings on marginal lands and own plot 	<ul style="list-style-type: none"> • Presence of planted trees on marginal and farmers' lands 	<ul style="list-style-type: none"> • Land cover land use change analysis, interview community members 	<ul style="list-style-type: none"> • MEFCC, MoANR, EBI, FWE, EWCA, LACO
		<ul style="list-style-type: none"> • Transport from meat and milk surplus areas 	<ul style="list-style-type: none"> • No meat and milk shortage in production deficit areas 	<ul style="list-style-type: none"> • Interview community members in production deficit areas if supplied from 	<ul style="list-style-type: none"> • MoANR, MoH

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	planting			surplus area, interview suppliers	
	<ul style="list-style-type: none"> • Animal protein malnutrition (meat & milk) due to loss of livestock s grazing lands go for tree plantings 	<ul style="list-style-type: none"> • Assess the feasibility of charcoal market before embarking on it 	<ul style="list-style-type: none"> • Complaint for charcoal market problem 	<ul style="list-style-type: none"> • Market assessment report review, interview suppliers 	<ul style="list-style-type: none"> • MEFCC, FWE
	<ul style="list-style-type: none"> • Charcoal market problem may be encountered 	<ul style="list-style-type: none"> • Educate on the health impacts of indoor charcoal pollution 	<ul style="list-style-type: none"> • Complaint on indoor charcoal pollution 	<ul style="list-style-type: none"> • Clinical data review on health problem of indoor charcoal pollution, interview affected persons 	<ul style="list-style-type: none"> • MEFCC, FWE, MoH
	<ul style="list-style-type: none"> • Indoor air pollution that may cause acute and chronic respiratory diseases, malignancies of the aero-digestive tract and lungs, burns, eye diseases 	<ul style="list-style-type: none"> • Ventilate rooms whenever using charcoal 	<ul style="list-style-type: none"> • Complaint on indoor charcoal pollution 	<ul style="list-style-type: none"> • Household assessment for the presence of ventilation, interview community members 	<ul style="list-style-type: none"> • MoH, MoWIE
SO10: Improved livestock management-	<ul style="list-style-type: none"> • Market problem of the products of livestock may be a challenge 	<ul style="list-style-type: none"> • Identify local and oversea markets for the products 	<ul style="list-style-type: none"> • Presence of market for forest products 	<ul style="list-style-type: none"> • Interview suppliers of forest products 	<ul style="list-style-type: none"> • MEFCC, FWE
	<ul style="list-style-type: none"> • Milk malnutrition especially to the kids 	<ul style="list-style-type: none"> • Maintain milk cows 	<ul style="list-style-type: none"> • Presence of milk 	<ul style="list-style-type: none"> • Livestock census 	<ul style="list-style-type: none"> • MoH, MoANR

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
			cows	report review	
	<ul style="list-style-type: none"> Bird diseases that is communicable to human may be a problem 	<ul style="list-style-type: none"> Purchase and transport milk from surplus area 	<ul style="list-style-type: none"> No milk shortage in production deficit areas 	<ul style="list-style-type: none"> Interview community members in production deficit areas if supplied from surplus area, interview suppliers 	<ul style="list-style-type: none"> MoANR, MoH
	<ul style="list-style-type: none"> Loss of assets (livestock) to be used for emergency case by selling 	<ul style="list-style-type: none"> Sanitation to be maintained 24 hours a day, 7 days a week 	<ul style="list-style-type: none"> Neat and clean livestock husbandry sites all the time 	<ul style="list-style-type: none"> Observation of the livestock husbandry sites 	<ul style="list-style-type: none"> MoANR
		<ul style="list-style-type: none"> Bio-safety measures to be taken 	<ul style="list-style-type: none"> Complaint on biosafety measures 	<ul style="list-style-type: none"> Report on inadequacy of biosafety measures taken 	<ul style="list-style-type: none"> MEFCC, MoANR, MoH
		<ul style="list-style-type: none"> Educate farmers on saving of what is earned (from the main income generating or alternative income sources activities) 	<ul style="list-style-type: none"> Increased accumulation of asset in the community due to saving 	<ul style="list-style-type: none"> Asset accumulation assessment, interview community members 	<ul style="list-style-type: none"> FCPA, SMEA
		<ul style="list-style-type: none"> Maintain few livestock to be used as an asset 	<ul style="list-style-type: none"> Presence of livestock maintained as an asset 	<ul style="list-style-type: none"> Interview community members, livestock census report review 	<ul style="list-style-type: none"> MoANR
SO11: Promote supplementary income generation	<ul style="list-style-type: none"> Conflict arise if unfair access or use right on NTFP prevail within the community 	<ul style="list-style-type: none"> Provide fair access to community members, especially the underserved and women 	<ul style="list-style-type: none"> Complaint from access restriction to NTFP 	<ul style="list-style-type: none"> Interview community members 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE, EWCA
SO12: Capacity building	<ul style="list-style-type: none"> Participation of women and wider stakeholder groups 	<ul style="list-style-type: none"> Ensure the participation of women is prioritized and all stakeholders have to 	<ul style="list-style-type: none"> Presence of participation of women in capacity 	<ul style="list-style-type: none"> Interview women if benefitted from capacity building, 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	<p>may be neglected</p> <ul style="list-style-type: none"> Support may be shared by those who already have the needed capacity 	<p>the opportunity to participate</p> <ul style="list-style-type: none"> Support should prioritize those with serious capacity problem 	<p>building</p> <ul style="list-style-type: none"> Presence of priority for those with capacity problem in capacity building 	<p>review of capacity building report</p> <ul style="list-style-type: none"> Interview of those with capacity problem if benefitted from capacity building, review of capacity building report 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
SO13: Inter-sectoral coordination on planning and implementation-	<ul style="list-style-type: none"> Stakeholders may not collaborate as desired 	<ul style="list-style-type: none"> Establish stakeholder coordination and mobilization unit for the daily follow up 	<ul style="list-style-type: none"> Presence of stakeholders' coordination and mobilization unit 	<ul style="list-style-type: none"> Observation, interview of stakeholders & the unit staffs 	<ul style="list-style-type: none"> MEFCC
SO14: Demand-driven Research and extension linkage	<ul style="list-style-type: none"> Community needs may not be properly addressed 	<ul style="list-style-type: none"> Maximize local stakeholder involvement in need identification 	<ul style="list-style-type: none"> Complaint from unexhausted need identification of the stakeholders 	<ul style="list-style-type: none"> Interview affected 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA, FWE
	<ul style="list-style-type: none"> Underserved communities may not benefit from the research and extension 	<ul style="list-style-type: none"> Ensure inclusiveness by involving underserved communities in the research process and benefit sharing 	<ul style="list-style-type: none"> Complaint from exclusiveness of the underserved community in benefit sharing, etc. 	<ul style="list-style-type: none"> Interview of affected community members on benefit sharing, etc. 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
SO15: Ensure full participation and equitable benefit for women	<ul style="list-style-type: none"> Weak collaboration of sectoral institutes in mainstreaming gender 	<ul style="list-style-type: none"> Build and strengthen institutional capacities of implementing partner organizations (IPOs) in gender and REDD+ issues 	<ul style="list-style-type: none"> Presence of IPOs for REDD+ implementation 	<ul style="list-style-type: none"> Interview implementing partners 	<ul style="list-style-type: none"> MEFCC
	<ul style="list-style-type: none"> Disregard/marginalize knowledge and 	<ul style="list-style-type: none"> Allow all community segment (men & women, 	<ul style="list-style-type: none"> Participation of all community members 	<ul style="list-style-type: none"> Interview community members 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, EWCA,

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	expertise of others (other area skill & knowledge will be eroded overtime)	youth & elders, etc.,) contribute available knowledge for the management of the natural resource	for the management of the natural resource		FWE
SO16: Benefit sharing	<ul style="list-style-type: none"> • Community may refuse to accept costs that REDD+ project brings to them • Lack clear mechanisms for sharing benefits may result in grievances • Overridden stakeholders adversely affect the implementation of REDD+ project • Income difference may be created between the REDD+ project members and non-members • Unequal 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation 	<ul style="list-style-type: none"> • Revenue generating activities devised and implemented 	<ul style="list-style-type: none"> • Amount of income generated from the REDD+ implementation, community members interview 	<ul style="list-style-type: none"> • MEFCC/Donor of the project
		<ul style="list-style-type: none"> • There should be policy, strategy and bylaw that define clear benefit sharing mechanism 	<ul style="list-style-type: none"> • Presence of legal and bylaw that define the power of PFM leaders 	<ul style="list-style-type: none"> • Assess the bylaw of PFM 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Implement indigenous grievance redress mechanism 	<ul style="list-style-type: none"> • Presence and exercise of indigenous grievance redressing mechanism 	<ul style="list-style-type: none"> • No. of conflict settled using indigenous system (against those settled in formal system) 	<ul style="list-style-type: none"> • MEFCC
		<ul style="list-style-type: none"> • Exhaustively involve stakeholders based on their degree of contribution 	<ul style="list-style-type: none"> • Involvement of stakeholder in REDD+ implementation based on their contribution 	<ul style="list-style-type: none"> • Interview of those involved in REDD+ implementation, REDD+ stakeholder involvement report review 	<ul style="list-style-type: none"> • MEFCC, EBI, MoANR, EWCA, FWE

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Strategic options	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	participation in the development of bylaw may bring disparities in implementing the bylaw	<ul style="list-style-type: none"> • Create alternate income generating opportunities for the non-members of the REDD+ projects 	<ul style="list-style-type: none"> • Presence of created job opportunity for the non-REDD+ members 	<ul style="list-style-type: none"> • Interview of the beneficiaries of the non-REDD+ members 	<ul style="list-style-type: none"> • SMEA, MEFCC, EBI, MoANR, EWCA, FWE
		<ul style="list-style-type: none"> • Bring the non-members to members of the REDD+ project 	<ul style="list-style-type: none"> • Increased no. of REDD+ members as new are joining them 	<ul style="list-style-type: none"> • REDD+ members book log review, interview new members joining REDD+ 	<ul style="list-style-type: none"> • MEFCC, EBI, EWCA, FWE

Table 20: Environmental Risks Mitigation Measures Monitoring Indicators for the Proposed Enhancement Strategic Options

Proposed Enhancing Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
ESO1: Diversifying local Livelihoods to non-forest based Options	<ul style="list-style-type: none"> • The non-forest based options might lead to increased need for wood products and land, which might indirectly increase the risk of deforestation 	<ul style="list-style-type: none"> • Options should focus on provisions of skill development trainings and opportunities to be engaged in non-farming job opportunities 	<ul style="list-style-type: none"> • Availability of options of skill development and non-farm job opportunities 	<ul style="list-style-type: none"> • Interview community members benefitted from skill development, assess the trend in non-farm jobs created 	<ul style="list-style-type: none"> • MoANR, MEFCC, FWE,
		<ul style="list-style-type: none"> • Providing support for non-forest based small and micro-enterprises focused on services and production of consumer goods and 	<ul style="list-style-type: none"> • Presence of non-forest based small and micro-enterprises for producing consumer 	<ul style="list-style-type: none"> • Assess consumer goods produced from non-forest resources, interview consumers and 	<ul style="list-style-type: none"> • SMEA, FWE

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Proposed Enhancing Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
		others	goods and others	suppliers	
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit the poor segment of society)	<ul style="list-style-type: none"> Development plans and programs targeting the poor could lead to more exploitation of resources, especially forest resource 	<ul style="list-style-type: none"> Review and adjust development plans and programs through stakeholder consultation and participation 	<ul style="list-style-type: none"> Availability of development plans and programs developed through stakeholder consultation and participation 	<ul style="list-style-type: none"> Check for the availability of development plans developed through stakeholder consultation and participation 	<ul style="list-style-type: none"> MoANR, MEFCC, FWE
ESO3: Promoting participation and empowering of underserved communities	<ul style="list-style-type: none"> Delegating power without the checks and balances may lead to corruption and further degradation of the resources 	<ul style="list-style-type: none"> Empowering should be with accountability and transparency 	<ul style="list-style-type: none"> Availability of empowered underserved community 	<ul style="list-style-type: none"> Interview of the underserved community members 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE
		<ul style="list-style-type: none"> Participation need to include all social groups (women and the youth) 	<ul style="list-style-type: none"> Availability of participation of all social groups 	<ul style="list-style-type: none"> Interview of the different social groups (women and the youth) of the community 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE
ESO4: Design strategies and revise policies to address the impacts of internal and	<ul style="list-style-type: none"> Lack of implementation of such policies further increase rate of deforestation 	<ul style="list-style-type: none"> Ensure guidelines on resource utilization are implemented and seriously followed 	<ul style="list-style-type: none"> Availability of guidelines that ensures the implementation of strategies and policies 	<ul style="list-style-type: none"> Check the availability of developed guidelines for implementing strategies and policies, interview 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE

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Proposed Enhancing Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
external social conflicts on forest resources	<ul style="list-style-type: none"> Lack of inter-regional coordination on the issue and absence of harmonized strategy among the regions may create implementation gaps and result in forest degradation 			sectoral offices for the presence of guidelines and their real implementations	
		<ul style="list-style-type: none"> Establish inter-regional coordination and operational framework when conflicts happen and result in displacement of people 	<ul style="list-style-type: none"> Presence of inter-regional coordination for settling conflicts 	<ul style="list-style-type: none"> Assess if there are conflict as a result of failure of inter-regional coordination 	<ul style="list-style-type: none"> MEFCC
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> High disparity in income and increasing gap between the haves and have-nots will result in increased reliance on forest resources for income 	<ul style="list-style-type: none"> Ensure wealth is fairly distributed among citizens and trickled down to the poor through services provision and taxation 	<ul style="list-style-type: none"> Complaint on unfair and unequal distribution of wealth among the community 	<ul style="list-style-type: none"> Community wealth distribution assessment 	<ul style="list-style-type: none"> MoFEC, HPR
ESO6: Ensuring fair and balanced allocation of resources to the	<ul style="list-style-type: none"> Lack of resources results in poor management of forest resources. Sufficiently available resource 	<ul style="list-style-type: none"> Allocate sufficient resource for the sector and consider the potential of forestry for the growth of GDP in 	<ul style="list-style-type: none"> Presence of suffering of forestry sector short of budget 	<ul style="list-style-type: none"> Check for the budget allotment of sectoral offices by the government 	<ul style="list-style-type: none"> HPR, MEFCC

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Proposed Enhancing Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
sector	increases capacity to stop illegal activities	the country			
ESO7: Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> Absence of sufficient labor might also affect forest management and protection activities 	<ul style="list-style-type: none"> Strategies should take into account specific local conditions and population dynamics, needs and availability 	<ul style="list-style-type: none"> Presence of policies specific to local conditions and population dynamics 	<ul style="list-style-type: none"> Check for the availability of policies specific to local conditions and population dynamics 	<ul style="list-style-type: none"> MoH, HPR
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	<ul style="list-style-type: none"> Controlling in-migration may increase pressure in affected areas (e.g., drought) leading to resource degradation 	<ul style="list-style-type: none"> Evaluate drought and land degradation affected areas for development potentials before out-migration 	<ul style="list-style-type: none"> Community rehabilitated at their place without out-migration 	<ul style="list-style-type: none"> Interview of rehabilitated community members 	<ul style="list-style-type: none"> FDPPC, MoANR
ESO9: Ensure a well regulated and managed resettlement program	<ul style="list-style-type: none"> Unplanned and unregulated resettlement results in extensive deforestation 	<ul style="list-style-type: none"> Ensure resettlements are implemented using approved guidelines on land and resource use 	<ul style="list-style-type: none"> Presence of policy and guideline for resettlement 	<ul style="list-style-type: none"> Check for the availability of policy and guidelines on resettlement, assess if resettlement done based on the available policies and 	<ul style="list-style-type: none"> FDPPC, MEFCC, EBI, MoANR, FWE

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Proposed Enhancing Strategic options	Environmental Risks	Environmental Mitigation measures	Monitoring indicators	Verification	Responsibility
				guidelines	
EOS10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> Negative attitude towards forests being seen as harboring pests leads to deforestation 	<ul style="list-style-type: none"> Educate local communities on the wider ecological roles and benefits of forests 	<ul style="list-style-type: none"> Enhanced knowledge of community on the ecological roles and benefits of forests 	<ul style="list-style-type: none"> Before and after educating knowledge test of those got education, assess the condition of forest after education offering 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
ESO11: Implement radical measures to stop the root causes of corruption	<ul style="list-style-type: none"> Corruption may not easily be stopped unless systemic measures are taken and thus the moves might even aggravate further deforestation 	<ul style="list-style-type: none"> Measures need to stem from root sources and actions be systemic than case treatment 	<ul style="list-style-type: none"> Complaint of corruption in forestry sector 	<ul style="list-style-type: none"> Assess forests affected by corruption, interview community and CBOs members for the prevalence of corruption in forestry sector 	<ul style="list-style-type: none"> FACC, MEFCC, FWE

Table 21: Social Risks Mitigation Measures Monitoring Indicators for the Proposed Enhancement Strategic Options

Proposed Enhancement Strategic options(ESO)	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
ESO1: Diversifying local Livelihoods to non-forest based Options	<ul style="list-style-type: none"> The uneducated and disadvantaged groups of the community might be left out from the opportunities Forest dependent communities may find it difficult to resort to new options and might face challenges 	<ul style="list-style-type: none"> Ensure inclusiveness and support activities with community's needs and interests 	<ul style="list-style-type: none"> Complaint from exclusiveness of the underserved community in benefit sharing, etc. 	<ul style="list-style-type: none"> Interview of affected community members on benefit sharing, etc. 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
		<ul style="list-style-type: none"> Options should provide priorities to the needs of forest dependent communities. 	<ul style="list-style-type: none"> Presence of priority options given to forest dependent communities 	<ul style="list-style-type: none"> check for the presence developed priority options to serve forest dependent community; Interview of those forest dependent communities 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
		<ul style="list-style-type: none"> Provide the necessary training and awareness on proposed alternatives 	<ul style="list-style-type: none"> Forest dependent communities made cope with alternatives availed for them 	<ul style="list-style-type: none"> Interview members of the forest dependent communities 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit	<ul style="list-style-type: none"> Development opportunities are often end up benefiting the resource rich and the elite groups 	<ul style="list-style-type: none"> Put in place a mechanism to ensure the resource poor and the disadvantaged are targeted and included 	<ul style="list-style-type: none"> Complaint from exclusiveness of resource poor and the disadvantaged 	<ul style="list-style-type: none"> Interview of affected community members on benefit sharing, etc. 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE

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Proposed Enhancement Strategic options(ESO)	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
the poor segment of society)					
ESO3: Promoting participation and empowering of underserved communities	<ul style="list-style-type: none"> Misuse of power might favor few members of the community and lead to illegal activities 	<ul style="list-style-type: none"> Fair representation and accountability should be ensured Social groups from the underserved communities need to be equally represented 	<ul style="list-style-type: none"> Presence of underserved community representatives, presence of legal and bylaw that define the power of institutes working with the community 	<ul style="list-style-type: none"> Interview members of the underserved community, assess the responsibilities and accountabilities vested to institutes working with communities 	<ul style="list-style-type: none"> MEFCC, MoANR, EBI, FWE
ESO4: Design strategies and revise policies to address the impacts of internal and external social conflicts on forest resources	<ul style="list-style-type: none"> Leniency by local groups towards displaced persons and indifference to the destruction of resources 	<ul style="list-style-type: none"> Impartiality in implementation of the strategies and strict control over incompletion is needed 	<ul style="list-style-type: none"> Implemented strategies to halt deforestation regardless of native or migrated communities are causing deforestation 	<ul style="list-style-type: none"> Interview both native and migrated communities whether strategies are implanted impartiality or not 	<ul style="list-style-type: none"> MEFCC, EBI, MoANR, FWE
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> High taxation may discourage investment and slow down development, causing increased unemployment 	<ul style="list-style-type: none"> Distribution of wealth can be achieved not only through taxation but fair distribution of development projects across the nation 	<ul style="list-style-type: none"> Availability of fair distribution of development of projects across the nation 	<ul style="list-style-type: none"> Assess the distribution of development projects distributed across the regional governments of Ethiopia, interview community members 	<ul style="list-style-type: none"> HPR, MoFEC

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Proposed Enhancement Strategic options(ESO)	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
ESO6: Ensuring fair and balanced allocation of resources to the sector	<ul style="list-style-type: none"> • Other social sectors (health and education) might be constrained and the growth of those sectors might be affected (financially and human resource) 	<ul style="list-style-type: none"> • Base resource allocations on proper analysis of the development needs, the gaps and priority level of the particular sector 	<ul style="list-style-type: none"> • Presence of suffering of different sectors short of budget 	<ul style="list-style-type: none"> • Check for the budget allotment of sectoral offices by the government 	<ul style="list-style-type: none"> • HPR, MoFEC
ESO7: Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> • Some religious and social groups might oppose the moves • Controlling population might reduce labor force 	<ul style="list-style-type: none"> • Support implementation with sufficient awareness creation trainings and through full participation of social groups • Interventions take into account local needs 	<ul style="list-style-type: none"> • Inclusion of religious and social groups in trainings on population growth 	<ul style="list-style-type: none"> • Interview of religious and social groups whether included trainings on population growth or not 	<ul style="list-style-type: none"> • MoH, MoE
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	<ul style="list-style-type: none"> • The resource poor and the weak might not be able to make ends meet 	<ul style="list-style-type: none"> • The necessary support should be provided to the poor in areas where out-migration is discouraged 	<ul style="list-style-type: none"> • Presence of support to the resource poor to stop them move to forest settlement 	<ul style="list-style-type: none"> • Interview resource poor community members, assess for resettlement in the forest 	<ul style="list-style-type: none"> • MEFC, EBI, MoANR, FWE
ESO9: Ensure a well regulated and managed resettlement program	<ul style="list-style-type: none"> • Absence of guidelines and exertion of pressure on resettled communities lead to 	<ul style="list-style-type: none"> • Ensure proper guidelines are put in place 	<ul style="list-style-type: none"> • Presence of guideline for resettlement 	<ul style="list-style-type: none"> • Check for the availability guidelines on resettlement, assess if resettlement done based on the 	<ul style="list-style-type: none"> • FDPPC, MEFC, EBI, MoANR, FWE

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Proposed Enhancement Strategic options(ESO)	Social Risks	Social Mitigation measures	Monitoring indicators	Verification	Responsibility
	social conflict			available guidelines	
EOS10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> • Changing attitudes may antagonize local values and beliefs for some groups 	<ul style="list-style-type: none"> • Take into account and work through social values and beliefs when teaching 	<ul style="list-style-type: none"> • Synchronized social values and introduced teaching system on forest 	<ul style="list-style-type: none"> • Before and after educating knowledge test of those got education, assess the condition of forest after education offering 	<ul style="list-style-type: none"> • MEFCC, MoANR, EBI, FWE
EOS11: Implement radical measures to stop the root causes of corruption	<ul style="list-style-type: none"> • Measures might disfavor or favor certain social groups 	<ul style="list-style-type: none"> • Ensure that measures are applicable regardless of status, power, or connections 	<ul style="list-style-type: none"> • Implementation of measures to stop corruption regardless of status, power, or connections 	<ul style="list-style-type: none"> • Assess reported cases of corruption related to forestry, assess cases got decision and on shelf from the filed cases of corruption in forestry, interview forest affiliated community and stakeholders for the prevalence of corruption in forestry sector 	<ul style="list-style-type: none"> • FACC, MEFCC, EBI, MoANR, FWE

10.6 Stakeholder Engagement in Monitoring and Evaluation

REDD+ program is required to fully engage a full range of stakeholders from Federal to community levels to secure their full acceptance and ownership of the project from the outset in a transparent manner. The program is also required to ensure any of the activities related to it will not cause adverse social and environmental impacts to stakeholders that can be confirmed through the stakeholder engagement. Stakeholders for the REDD+ programs are those groups that have the rights pertaining to REDD+ or those who will be directly involved in the implementation of the REDD+ activities or those who could be affected either positively or adversely by REDD+ activities. They include relevant government agencies, formal and informal forest users, private sector entities, and local communities as defined and briefly presented in the SESA report.

Engaging stakeholders at different levels through different approaches is essential. Consultation and participation is one such approach to engage stakeholders. Consultation and participation helps to ensure ownership and accountability and to build and improve relationships between all stakeholders. This has the benefit of avoiding potential conflicts during implementation that could emerge as a result of lack of transparency.

Moreover, multi-stakeholder engagement is mandatory since forests are the direct source of livelihoods and wellbeing of poor people and broad community support based on free prior informed consultation of these community members is a key factor for implementing the REDD+ program. This is due to the fact that the REDD+ has both benefits and potential adverse impacts that need to be acknowledged and accepted by the stakeholders from the very beginning. For the REDD+ program to succeed in the long term, these benefits and risks should be communicated and known to those benefiting and also potentially affected by the risks in a transparent manner. Implementation of the identified risks and mitigation measures designed for those need to be monitored periodically by involving the stakeholders.

In general, the engagement of all stakeholders including local communities at grassroots are essential for the successful implementations of REDD+ and ESMF. While stakeholders and community engagement for the REDD+ - ESMF implementations are essential, it requires continuous assessment and identification of all stakeholders at all levels including local communities residing in and around the forests, from the start to the end.

A national REDD+ Consultation and Participation (C&P) Plan is finalized with the overall objective of providing a framework and platform for multilevel dialogue among all stakeholders to ensure ownership, transparency and effective and informed consultation and participation of the relevant stakeholders in the process of REDD+ Programme in Ethiopia.

The complex and dynamic consultation process at different level will be guided by C&P Plan. The C&P plan classifies REDD+ stakeholders and set out the mechanism to reach the different stakeholders.

The national C&P plan was prepared by taking into consideration the lessons, experiences and processes learnt during the R-PP preparation and implementation which includes the pilot projects and REDD+ policy framework development process at all levels from local to federal. The C&P plan prepared at national level help to incorporate the voices and insights of forest dependent people into the strategic decision making process of the implementation of REDD+ and avoid the sole

decision of professionals. Thus, the national C&P plan is prepared to ensure full and effective engagement and participation of all ranges of stakeholders from design to emission reduction phases of REDD+ Programmes in the country.

11. Grievance Management and Redress Mechanism

A grievance redress mechanism (GRM) is a process for entertaining PAPs/PACs concerns and complaints. It involves receiving, reviewing and addressing issues of grievance(s). The implementation of REDD+ and its safeguard instruments may trigger social and environmental impacts and the implementing and funding organization have social responsibilities in rectifying the impacts to be induced. Unless grievances are timely and correctly resolved (see Annexes 16 and 17), it scales up and may reach the level that brings failure in the implementations of REDD+ and its safeguard instruments.

11.1 Sources of Grievances in REDD+

Grievances usually arise during use, conservation and management of resources. Forest grievance is one of the major grievances in developing countries where the livelihood of millions of people is linked with forest resources.

During the consultation from federal to Kebele levels, stakeholders, including communities, had provided their concern on how different kinds of conflict arise from REDD+ implementation. Most of the sources of conflict were summarized and incorporated in strategic options risk analysis part of SESA document. Here, some of the outstanding sources of conflicts are presented.

- During consultation of the local community at Woreda level and household interview, they indicated that absence of benefits and lack of consultation and engagement make them generally powerless about the development (REDD+) and these may trigger conflict between the community and the project implementer.
- PFM as one of the activities of strategic option for the implementation of REDD+ is suggested that may trigger conflict among the community and between the community and implementer. It was explained PFM from experience failed to recognize the changing dynamics with the resources as well as population (growth and change in need or demand). As a result, new generations in those years disregarded of benefit sharing accrued from the development and protection of forests. They underlined the upcoming project of REDD+ to critically consider the social and biological dynamics if it uses PFM as a tool or activities of strategic option.
- In REDD+, conflicts may arise during benefit sharing phase. People may not involve during the early phase of the REDD+ project activities but come late when benefit sharing is about to be effected. There could be also certain community or individuals of the community members (such as vulnerable groups, those living far from the forest but are enjoying the benefit before project installation, migrants, etc.) that may be excluded from benefit sharing. Therefore, the way that REDD+ benefits are distributed and those included or excluded from the benefit could become a significant source of conflict for the REDD+ project. Establishing inclusive and equitable benefit sharing mechanisms will be key to mitigating and managing these conflicts.
- Tenure right can also be source of conflicts. Clearing of land for agricultural development, migrant settlements can also arise because forest borders are unclear.
- During the consultations, communities suggested REDD+ to have benefit sharing management system and they recommended continuous consultations to be carried out to resolve issues

otherwise become the source of conflict among the community members and the community and implementers.

- Conflict can also arise at higher policy makers level due to competition overland and livelihood needs (e.g. Ministry of Water, Irrigation and Energy want promote biofuels in area called waste land or according to vegetation ecologist it is classified as woodland, Ministry of Agriculture and Natural Resources promotes commercial agriculture on the same land). REDD+ also promotes the development and protection of forest, intensification of agriculture, and many others as strategic tools to achieve its goals. When these tools are land based (implemented on land), there could be competition for land among themselves. Thus, absence of coordination and harmonizing among the implementing entities on land may bring conflict.

11.2 Grievance Redress Mechanisms in Practice

11.2.1 World Bank Group Grievance Redress Service

Communities and individuals who believe that they are adversely affected by a WBG supported program, may submit complaints to existing program-level grievance redress mechanisms or the WBG's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address program-related concerns. Program affected communities and individuals may submit their complaint to the WBG's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WBG non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WBG's attention, and WBG Management has been given an opportunity to respond. For information on how to submit complaints to the WBG's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the WBG Inspection Panel, please visit www.inspectionpanel.org. The International Finance Corporation (IFC), one of the five affiliated institutions of the WBG, recommends a number of steps and resources for managing an effective grievance mechanism (Box 9).

Box 9 . Process steps and resources for grievance management

Process/ steps for grievance management

- Publicize the mechanism
- Receive and register grievances
- Review and investigate grievances
- Develop resolution options, respond to grievances, and close out
- Monitor and evaluate

Resources for grievance management

- People - trained staff members or external resources experienced in social and environmental management and in dealing with community concerns and complaints
- Systems - systems for receipt, recording, and tracking of the process (for example, grievance log, tracking cards)
- Processes - written procedures for handling grievances and responsibilities assigned for each step as well as for management oversight
- Budget - estimating, allocating, and tracking costs associated with grievance handling

From International Finance Corporation (2009)

Box 10. Recommendations for a grievance mechanism for a REDD+ project in Ethiopia

1. Assign person in project area who will receive grievance/complaints in person and communicate to the authority who respond to the grievance
2. Place a grievance box at village level where project will be implemented
3. Setup a grievance record book at project implementation area
4. Arrange a cell phone dedicated to the acceptance of grievance/complaint through voice record or text message.

Simple rule

- In person grievance/complaint appeal should be recorded immediately and must be communicated daily
- Boxes should be checked weekly by project staff and a community representative together
- Grievance record book must be read and communicated weekly to all stakeholders of the project
- Text messages will be checked daily. A staff member will confirm receipt of the message and state how long it will take to respond.

11.2.2 Grievance Redress Mechanisms in Ethiopia

There are several grievance redress mechanisms in Ethiopia successfully practiced for centuries. These mechanisms are generally categorized into three broad classes as traditional, religious and formal. The institutions of the Gadaa system among the Oromo, the Shimagelle by the Amhara and Tigrean, and the other ethnic groups are known to fall under traditional systems of grievance redress mechanisms, while those mediated by the religious leaders are known as religious. The formal grievance redress mechanism follows the court system from the local Shengo to the modern courts.

While implementing grievance redress mechanism the principles used to address grievance that arise in REDD+ includes **Legitimacy, Accessibility, Predictability, Equitability, Rights-compatibility, and Transparency**. These six GRM principles are in line with the national REDD+ GRM guideline. Similarly, the procedures to address grievance will follow the procedure indicated in the national GRM guideline. The Program would make use of traditional, religious and formal grievance redressing mechanisms using the existing Kebele, Woreda, Regional, and federal Public Grievance Hearing Offices (PGHO) in the country.

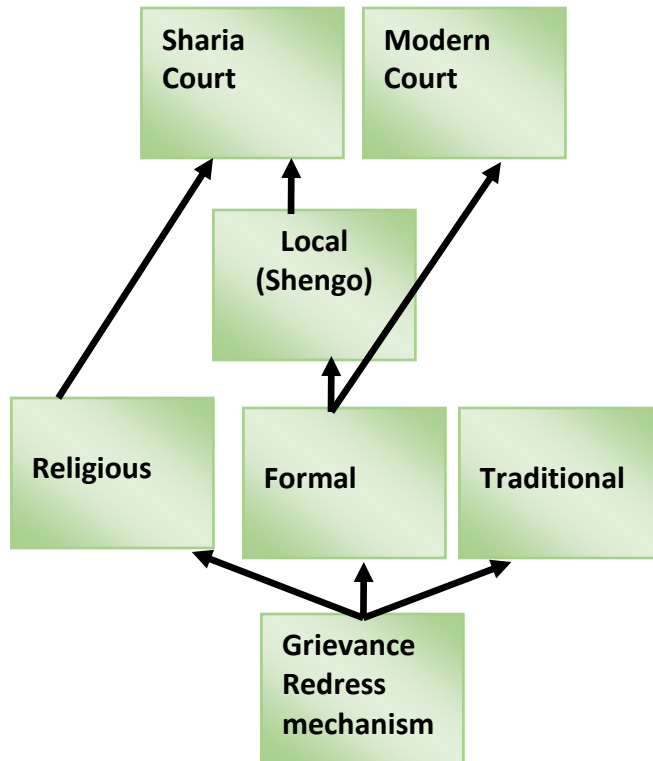


Figure 6: Existing Grievance Redress Mechanisms

11.2.2.1 Traditional Grievance Redress Mechanisms

Traditional grievance redress mechanisms and processes exist throughout Ethiopia. However, there are stronger in Oromia, SNNPRS, Afar, Somali and Gambella Regional States. In these regions, there are strong tradition of informal resolution and acceptance of the mode of grievance redress mechanisms by all parties involved in the conflict. In Oromia, the practice of traditional grievance redress mechanism seems even stronger than the other regions.

Some of the traditional grievance redress mechanisms have gaps in involving women. Women are represented by men in some important public decision-making events. As a result, their issues are not well addressed. In different parts of the country, women involve directly or indirectly in conflicts such as war or competing for resource (e.g. grass for livestock). They sometimes instigate men to go to conflicts that include praise of men that join in conflicts or nag and abuse those who are reluctant to join in conflict. Thus, it is of a paramount importance in including women in conflict management and redress.

A) The Oromoo Gadaa System

The Oromoo peoples have rich culture of resource management and settling of grievances arising from the management and uses of natural resources derived from the traditional institutions such as Gadaa, Aadaa, Safuu, Seera and Sinqee. In the Oromoo culture, responsibilities are categorized based on age classes. For instances, it is the responsibility of the Luba elders whose ages are between 40-48 to redress grievances within the community or among groups and individuals and apply the laws dealing with the distribution of resources, criminal fines and punishment, protection of property, theft, etc.

The indigenous mechanisms have been found out to be the best in redressing grievances both inter (within the community) and intra (with the government and/or neighborhood communities). The Gadaa system as mentioned above is one of the best indigenous tool used to harness grievances that arise over the management and use of natural resources in the Oromoo culture.

B) The Shaka Gepitato System

The Shaka Communities are living in the South Western part of Ethiopia mainly in forest dominated vegetation and have kept the Shaka Gepitato System intact to date to protect their natural resources. In the Shaka community (Shakacho), the Gepitato system is used to maintain the culture and value of the community. Gepitato assumes the responsibility of administering natural resources such as cultural forests and wetlands, customary dispute resolution, impose and enforce punishments to the violation of traditional rules related to resource management. Gepitatos identify offenders through swearing and cursing subject defaulters to coercion (Tadesse, et al, 2011).

C) The Gambella Wilok and Carlok Systems

In Gambella region, though insignificant in its nature and causality, there is inter-group conflict between the Anyuaa and Nuer communities due to control over natural resources that emanate from livelihood practices-the Anyuaa being cultivators while the Nuers being predominantly pastoralists. The conflict between the two communities is settled traditionally by elders from both communities. In case there is a loss of human life during the conflict, this is “a blood payment” in the form of cattle as compensation. As a sign of settlement of the conflict, elders break traditional fighting tools (such as spears) ushering the end of the conflict and revenge. This conflict management system is called ‘Wilok’ by Nuer community while it is called ‘Carlok’ in Anyuaa community. This system is being overridden by formal government system of grievance redress mechanism.

11.2.2.2 Religious Grievance Redress Mechanisms

A) Sharia Court

The Shari’a court is a system that is run by local communities but is nevertheless part and parcel of the formal legal machinery. The tentacles of Sharia courts sometimes start at the Kebele (PA) level. When traditional ways of redressing grievances fail to achieve the desired outcome, then the case is referred to the Sharia’ courts where the disputants face a statement of verdict given by the religious judges (Qadis). This structure has some links to the government court at the Woreda level. While the sharia’ courts work independently of the modern courts, it does not look into cases being handled by the formal courts. Its decisions are approved and implemented by other formal legal and administrative bodies at the higher level.

11.2.2.3 Institutional Grievance Redress Mechanisms

A) Social Courts

The Ethiopian Government has established Kebele Administrations (KAs) as the smallest unit of administration throughout the country. Within the Kebele Administration are setup social courts which are powerful instrument for formal redressing of grievances at grassroots level. *Shengo* is a judicial committee to oversee conflicts with the power to impose decisions through fines and imprisonment. Grievances related to natural resource management are reported to the relevant government office through the KAs after decision is being made by *Shengo*.

Social courts represent a fundamental and irreplaceable tool for quick and affordable dispute settlement in Ethiopia, although they are not mentioned in the FDRE Constitution. However, some regional states’ (e.g. the Oromia Regional State) constitutions have established social courts. The Revised Constitution of Oromia Regional State of 2001 included social courts as one of the Kebele structural organization. According to Article 98 of this Revised Constitution of 2001, judges of social courts are appointed by the Kebele council upon submission of candidates by the principal administrator of the Kebele. These social courts, which are created and recognized under state law, are part of the official judicial system. Many cases, especially smaller ones, start at Kebele level before social courts. Appeals can be made to the first instance or Woreda courts. They are staffed

with non-professional judges. Social courts are the source of legal redress for the vast majority of Ethiopians. As there are thousands of social courts in the country, they are easily and quickly accessible even in remote places. They treat thousands of cases that might otherwise be backlogged in the regular justice system.

Social courts are established to ensure peace and stability among Kebele community and thereby create conducive atmosphere for development and to make best efforts to raise the legal consciousness of the Kebele community. As indicated above, social courts have jurisdiction over minor cases. For instance, the Determination of Powers of Social Courts of Oromia Proclamation No. 66/2003 limits the jurisdiction of social courts on cases up to 1000 ETB.

B) Court

This is a formal state judiciary system that may be viewed as external to the parties involved in the grievance. The modern court established at Woreda level accomplishes the issues of grievances that arise in the community. This court handles both civil and criminal cases. The decision made at Woreda court abides to the parties involved in grieves with their rights reserved to take to the case into the next higher level court by appeal. The Woreda court mostly settles grievance cases related natural resource management and use.

C) The Office of the Ombudsman

This office has an organ that protects citizens from maladministration. To accomplish its activities, it has powers to: supervise administrative directives issued, and decisions given, by executive organs and the practices thereof so that they do not contravene the constitutional rights of citizens; receive and investigate complaints in respect of maladministration; conduct supervision, with a view to ensuring that the executive carries out its functions in accordance with the law and to preventing maladministration; seek remedies in case where it believes that maladministration has occurred; and make recommendations for the revision of existing laws, practices or directives and for the enactment of new laws and formulation of policies, with a view to bringing about better governance.

Table 22: Suggested REDD+ Grievance Redress Mechanism at Different Levels

Level	Responsible Institution	How
Federal Level	MEFCC- REDD+ Secretariat (REDD+ Steering Committee)	The national REDD+ Secretariat and MEFCC give response within a maximum of one-month time on cross cutting conflict issue not responded by a region.
	Federal Ombudsman's Office	The Federal Ombudsman gives advice for unresolved issues before the case submitted to the court
	Federal Court	Grievances settled at different level may be pursued at the court if complainants not satisfied with the grievance redressed at that level.
Regional Level	Regional Environment Office & Regional REDD+ Coordination unit	If stakeholders or community may not satisfy with the grievance settlement proposal or may be referred to the regional environment office, then the regional office will give response within 15 days. Regional stakeholders can submit their appeal to the offices
	Regional Ombudsman's Office	Regional stakeholders can also get advice from the office
	Regional Court	Regional stakeholders affected by the implementation REDD+ can appeal to the court if it is not resolved at environment office
Woreda Level	Woreda Environment Office	For grievance not addressed at Kebele level and other grievance raised at Woreda level, appeal can be submitted to the Woreda Environment Office and provide response after clarifying the issue within 10 days. If the applicant may not satisfy by the response, then he/she can take the issue to the Regional REDD+ office or Woreda formal court
	Woreda Ombudsman's Office	The affected stakeholder can also submit its appeal to get advice to Ombudsman's
	Woreda Court	The applicant can submit the appeal to the formal court and continue with the formal process
Kebele Level	Kebele Shengo or Traditional Leaders (Yahgershimagle, Aba Gada, Shaka Gepitato System etc.)	Community/person can apply for traditional leaders and/ or Kebele Shengo for grievance caused by REDD+ implementation. Response is to be discharge within 10 days of receiving the complaint.

12. Validation

The SESA, this ESMF and the RPF as well as the PF draft documents were presented in a validation workshop organized by the Ministry of Environment, Forest and Climate Change on September 30, 2015 to various stakeholders gathered from NGOs, other sectoral Ministries, regional REDD+ program offices. Concerns of the stakeholders on all the documents and compiled comments from stakeholders were forwarded from the REDD+ secretariat office to the team of the consultants. This ESMF was amended based on all the comments forwarded from all stakeholders.

13. Limitations, Gaps in Data and Knowledge

During the field surveys and stakeholder consultations at various levels (Federal to Kebele), the major limitation in getting the concerns of the stakeholders was the lack of information and poor understanding about the REDD+ program and its relevance to climate change mitigation. In most cases, experts in sector offices have not heard about REDD+ at all. Besides, development workers and local community members are not aware of the REDD+ objectives and less exposed to related information. This has taken a lot of time to create understanding of the program and get their views, concerns and suggestions to address the critical issues. The other limitation was the lack of data on forest resources at the district and region level. The existing records are not updated and sometimes authenticity is in question. Therefore, forest resource related data were cross referenced with various sources such as national reports, statistical reports, forestry resource assessment reports and other published materials. Although there are federal and regional level forest resources management regulations, proclamations and guidelines, there is limited knowledge of such proclamations by the experts and community members. Either because of this low awareness or other reasons, the existing regulations is barely implemented. Forest resource abusers/encroachers are not brought before courts and as a result illegal settlement in forest areas is common. The number of such settlements is not clearly known.

The timing of the field survey had coincided with the timing of the national poll. It has been a challenge to get the Kebele leaders and development workers for interview and organizing the community discussions. However, the survey team has made great effort to facilitate the time for discussions by aligning the schedule towards the end of the polling days.

14. Observations and Recommendations

- Ethiopia is considered as the power house of Africa due to her high potential for hydropower. Harnessing the potential and moving away community for biomass energy dependence contributes to the halt deforestation and forest degradation.
- Available data indicates that Ethiopia has high potential for agriculture but has not fully developed it yet. Intensifying this potential decreases lateral expansion of agricultural lands at the cost of the forest lands.
- Population growth is one of the factors that affect deforestation and forest degradation. Family planning and devising alternate sources of livelihoods for the ever increasing population could be a solution to halt deforestation and forest degradation.
- The vegetation types in different parts of Ethiopia are reported to be experiencing different pressures from illegal settlement, deforestation and forest degradation, agricultural expansion and plantation of commercial and food crops. Unless these activities are harnessed, it undermines the implementation of REDD+ in the country.
- Ethiopia had close to 40% forest cover a century ago and now is claimed at about 15 % though there are inconsistent reports in this recent figure. Whatever the figure may be, there are drastic changes in the forest cover of the country. The causes of deforestation and forest degradation are classified as direct and underlying causes. The direct causes of deforestation and forest degradation are identified as small-scale agricultural conversion, large-scale agricultural conversion (investment), increased wood extraction for fuel and construction purposes and livestock over grazing, while that of the underlying causes identified as gaps in implementation of the forest policy and regulations are, tenure/unclear forest user rights, absence of clear benefit sharing mechanisms, lack of private investment in forestry development and weak law enforcement. Implementation of REDD+ can be an opportunity to restore the lost forest cover through stopping these direct and underlying causes of deforestation and forest degradation. ESMF ensures REDD+ to be implemented as designed and expected to be.
- There are already pilot REDD+ projects and CDM projects in the country (Bale Mountain Eco-region REDD+ Project, REDD+ Participatory Forest Management in South-West Ethiopia, Yayu REDD+ Project, Oromia Forested Landscape REDD+ Program and Forest related CDM Projects) where experience can be built on. Hence, REDD+ implementation has already got good ground and much of the activities are on-going, which will continue to intensify over the course of time. The national REDD+ Secretariat should, therefore, closely work with those with good hands on REDD+ and CDM.
- There are several national and international legal frameworks Ethiopia has enacted and ratified to protect environmental and social impacts and avert adverse impacts of strategies, programmes and projects. REDD+ should be implemented within the framework of these national and international legal frameworks.
- For each of the strategic options given by the national REDD+ Secretariat and those additionally proposed (enhancement strategic options) by the consulting firms, adverse

social and environmental impacts were identified and their mitigation measures proposed. These mitigation measures for the adverse impacts (social and environmental) are general and given at strategic level. It is recommended project and site specific adverse mitigation measures to be identified later during the project preparation and implementation phases.

- The concern of the communities and stakeholders during a specific project preparation should be captured and integrated in the ESIA/ESMP report with the proposed mitigation measures and mainstreamed into the project document as well.
- Projects fall into three different categories depending on the impact they induce. Those which are with high adverse social and environmental impacts (category A), those with optimum or medium (category B) adverse social and environmental impacts and those with no adverse social and environmental impacts (category C). These categories of the REDD+ project should be identified during the project screening time.
- The preparation of safeguards instrument (such as ESIA) for REDD+ also needs scoping of the project, preparation of the term of reference (ToR) and preparation of ESIA. Scoping is used to identify the requirements for the preparation of ToR while ToR is a road map used to direct consultant for the preparation of ESIA within the given objectives and time frameworks. ESIA report identifies potential impacts (positive and adverse) of project and propose mitigation measures to be implemented for the identified adverse impacts. The general outlines or templates for the preparation of both the ToR and ESIA of a project were given in annex section of this report.
- It is observed that MEFCC has no structural representation in regional governments which will impair the implementation of ESMF. Hence, it is recommended MEFCC soon to open its offices in regional governments for the implementation of ESMF.
- Capacity building for the implementation of ESMF is important. Capacity need assessment of a project is needed to be identified during the design of projects.
- The Consulting firms have identified the different capacity needs of sectoral and cross-sectoral offices at different levels including that of the stakeholders for consideration of the capacity building. It is, however, recommended to conduct detailed capacity need assessment (human and material) for a specific project.
- The budget requirement of REDD+ and its safeguard instruments implementation was calculated for four (4) years, during which it will be active, based on the current market value of the professional payment and material price. It is recommended the safeguard specialist to revise and update the estimated budget based on the capacity need assessment and the will be market values.
- Once monitoring and evaluation of REDD+ is done, it should be communicated (reported) across the board at all levels (national to local) for their follow up and detection of gaps within their scopes of engagement.
- The responsibility of monitoring, evaluation and reporting (MER) of REDD+ should be done by a separate but complementing bodies that will be created at the national, regional, Woreda and Kebele levels

- Environmental monitoring by the relevant stakeholder in Ethiopia is loose due to various reasons including capacity gap. Thus, capacity building through identifying capacity needs is vital for effective and efficient monitoring and evaluation purpose.
- For the adverse social and environmental impacts of the given and proposed strategic options, mitigation measures, monitoring indicators, means of verification and responsible institutes were given. Detailed site and project specific monitoring, means of verification and responsible institute should be prepared including new or emerging adverse impact identification and proposed mitigation measures.
- In Ethiopia, there are different types of grievance redress mechanisms (GRMs) that include traditional, religious and formal ones.
- In all the regions of Ethiopia, there are well-known traditional redress mechanisms which the Gadaa system of Oromo, the Shaka Gepitato system, the Gambella Wilok and Carlok systems and the Amhara & Tigrean Shimgillina systems are only few to mention.
- The traditional grievance redress mechanisms are cost effective and are socially acceptable in most cases. Hence, it is recommended that the traditional GRM to be used for REDD+ and its safeguard instruments grievance redress. Currently, the traditional GRMs are weakening and there is a need to strengthen them. The formal GRMs should be opted for only when conflicts will fail to be resolved in the traditional GRMs. Formal GRMs should only supplement the traditional GRM but not replace them; however, it should be noted that all grieves in REDD+, for instance human right violation, corruption, deliberate or systematic refusal of implementing policies or strategies and other similar cases, cannot be resolved using traditional GRM but must be referred to formal GRMs.
- During the field assessments, the sources of grievances suggested were the absence or unfair benefits sharing, lack of consultation and engagement on issues that affect their livelihoods. When and if PFM used for REDD+ implementation fails to recognize the changing dynamics of the resources and population and brings exclusion of community members from benefit sharing, then conflict can arise. Communities grievances should be taken seriously at different levels from federal to community.

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16. Annexes

Annex 1: Sampled Sites and their GPS Readings

Region	Zone	Woreda	Kebele	Easting	Northing
Afar	Zone-3	Gewane	Gelela Dura	674801	1123452
			Gebeyabora	676998	1129652
Amhara	North Shewa	Tarmaber/ Debre-Sina	Wofwasha	583208	1081256
			Debre-Meaza	582412	1084475
	Gondar	Metemma	Das Michael	192946	1410810
			LemlemTerara	208019	1402314
	Awi	Banja-Shikudad/ Kosober	Askuna abo	250534	1215129
			Senkessa	254418	1213287
Benihangul- Gumuz	Asosa	Bambasi	Mender 40	694140	1095181
			Mender 42	670424	1067037
	Asosa	Asosa	Amba 14	669115	1112816
			Amba 17	668795	1096227
Gambela	Anuak	Abobo	Okunu	678274	871991
			Chobo Ker	672822	871954
	Mezenger	Godere	Goshine	727173	812551
			Gelisha	750933	821595
Oromia	KelemWollega	Anfillo	Ashi	685759	956722
			Duli	683836	957000
	Illubabor	Yayo	Gachi	692982	1084304
			Wabo	696472	1085436
		Didu	Gordomo	779796	883239
			Kochi-Gechi	777730	877020
	Bale	Harena Bulk	Shawe	575138	710914
			SoduWelmel	571293	710622
		Dinsho (BMNP)	Hora Soba	586779	784856
			Zolo-Ababo	582558	785464
	West Arsi	Dodola	Deneba	519526	768382
			Berissa	525233	772244
	Jima	Gera	GuraAnfallo	193448	844807
			Genji Chella	197933	857216

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Region	Zone	Woreda	Kebele	Easting	Northing
	Guji	Odo Shakiso	Suke Kuto	470646	652948
			Hangedi	470757	652861
	West Shewa	Jibat	Maru Jibat	329154	965496
			AbeyiReji	321184	963234
	West Hararghe	Anchar	Midgdu	635324	953245
			Dindin	640279	959740
SNNPR	Gamo-Gofa	Arba Minch Zuria	Kechema Ocholo	338155	657381
			Zeyise Eligo	324098	645038
	Kafa	Decha	Awrada	190038	788248
			Gedam	198301	796776
	Bench-Maji	Sheko	Giz Meret	768722	784922
			Shimi	768129	782386
	Sidama	Wendo Genet	Wesha Soyama	477373	783056
			Wetera Kechema	457393	781688
	Sheka	Masha	Ouwa	105531	866798
			Keja	107948	868476
Somali	Jarar	Yu'ale	Dusmo	382396	907738
			Afweyne	381535	916706
Tigray	Misraqawi	AtsbiWemberta	Barka-Adisbha	579455	1532916
			Kelishalmini	583559	1508607
	Mirabawi	Wolkayit-Tegede	Adi Jamus	332000	1528389
			Mogue	336978	1552136

Annex 2: Summary of Consultation Conducted at Federal, Regional, Woreda and Kebele/Community Levels

Federal Level

The consultation process at federal level was held with stakeholders that were drawn from a wide range of stakeholders such as representatives of government organization, major ministries (Agriculture, Environment and Forestry, Energy and Investment), both local and international non-governmental organizations, civic societies, activist groups, religious groups, gender groups, donor groups, academia, and research institutes.

The presupposed strategic options and strategic options identified in studies conducted in Oromia such as PFM, Agroforestry, Area closure, Agricultural intensifications, Small-scale irrigation, use of Energy saving stoves were used as key consultation points. The impacts of the strategic options and their mitigation measures and the legal and policy frameworks in which these strategic options should be implemented were discussed with respect to the social and environmental safeguards of the forest communities of the country.

The major concern surfaced out from representatives of the major ministries is the issue of conflicts of interest between policies and strategies when it comes to implementation of strategic options on the ground. Representative from the Ministry of Agriculture has indicated that strategic options that aim at reducing deforestation and forest degradation may not be easily and effectively accepted and understood in the perspectives of snowballing agricultural produces both at small and large scales. He also emphasized that the same case could be reflected from the energy and investment sectors. Policy revisions and harmonizing of strategies of the agricultural, energy, investment and forest and environment sectors should be done before, during and after the implementation of REDD+ strategic options. The national REDD+ should take the responsibilities for creating platforms to instigate discussions among cross-sectorial institutions at national and regional levels. Awareness creation programs on the legal and policy frameworks of relevant ministries should also be done on regular basis in order to familiarize stakeholders with policies and strategies of sectors other than theirs. A suggestion has been coined by a representative of civic society that the national REDD+ programs should support and use civic societies that can facilitate platforms to maximize opinions and suggestions that would help in harmonizing cross-sectorial policies, strategies and legal frameworks for successful implementation of proposed strategic options.

Strategic options related to participatory management of forests, area closure and agroforestry have been endorsed as viable strategies for implementation by a majority of stakeholders. However, concerns from representative of nongovernmental organizations on issues of depriving local communities from the very resource that they once use to access freely were raised as matters that may create a problem of illegal natural resource abuses at large scale. REDD+ projects that are implementing the strategic options should identify, prioritize and provide alternative resources to communities in the project areas and adjacent communities. Representative of civic societies have also raised the issue of access restriction to sacred places, social gathering places, pasturelands, and communication. It was emphasized that the design of the strategic options should carefully look into alternatives to accommodate social matters and activities within the project implementation area that have little or no impact on the forest. Accommodation of social matters in the strategic options can prevent the occurrence of conflicts and help local communities to endorse the REDD+ projects

as their own as emphasized by the speaker. On the other hand, REDD+ program should launch awareness creation programs on PFMs, area closures, and agroforestry activities and on legal and policy matters to communities and relevant stakeholders at all the project implementation areas.

The federal level consultation on Environmental and Social Management Frameworks (ESMF), in general, emphasized that the national REDD+ program should conduct intensive consultation and participation on cross-sectional issues such as:

- Harmonization of policies of the major sectors (agriculture, water, irrigation and energy, investment, industry and environment and forest)
- Synergizing of overlapping and in some cases antagonizing strategies of the major sectors
- Contextualizing of options for enforcement of environment and forest related laws and regulations
- Refining and contextualizing of the mitigation measures through regular consultation with the major sectors and representatives of the forest communities in REDD+ project implementation areas
- Synchronization of land use plans of the major sectors if available or support the development of complementary land use plans of these sectors at national and regional levels

Regional Level

The regional level consultation was held at Oromia with the assumption that the national REDD+ program can extract lessons from Oromia REDD+ pilot projects. Much of the issues consulted at federal level received similar attention and reflections on the regional consultation. More emphasis was given on building capacities of institutions and stakeholder that works closely with the National REDD+ program and projects that are implementing the strategic options. With this regard building capacities and strengthening of regional REDD+ coordination units at regional level should receive attentions as emphasized by participants. Regions such as Amhara, Tigray, and SNNPRS were among the regions that REDD+ project has recently opened coordination units. However, much has to be done to raise the implementation capacities of the strategic options and monitoring and evaluation of the impacts of the implementation by the coordination units.

Awareness creation on the impacts of the strategic options and their mitigation measures to stakeholders in respective regions should also take priority in the national REDD+ program as emphasized by participants. Depending on the context of the regions' social and environmental institutional setups the national REDD+ program should approach regional institutions and establish a network of social and environmental safeguards for imposing the mitigation measures. In the process of doing this the priority of the National REDD+ program should focus on building the capacity of the actors that support and work in collaboration with the REDD+ projects in regions.

The structural setup of major sectors that contribute to deforestation and forest degradation in regions are more or less similar to the national level organizational structures. Therefore, regional platforms and networks should be established to bring these sectors together for discussion on reduction of emission from deforestation and forest degradation. Harmonization of policies, strategies and action plans could only be achieved if the national REDD+ in collaboration with the regional REDD+ coordination units could facilitate the process of bringing together the sectors to discuss on issues such as striking a balance between overlapping strategies and effort duplication.

Permanent representatives from the agricultural sector, energy, water and irrigation sector, from regional investment offices, natural resources bureaus and other relevant stakeholders should be negotiated and consulted by the national REDD+ secretariat to work with the regional REDD+ coordination units and regional focal persons.

Law enforcement institution of the regions should also be strengthened and supported by the national REDD+ secretariat through organizing training and awareness creation programs so that legal bodies of regions could understand the objectives, processes and monitoring and evaluation issues of the REDD+ projects in their jurisdictional areas. Support to strengthen linkage between regional, woreda and kebele/community level legal institution should take consideration in the action plans of federal and regional REDD+ coordination offices tackle problems of deforestation and forest degradation as explained by representative from regional legal institution.

In addition, members of the consultation program have remarked that the REDD+ program should work on establishing stakeholders' network among the major sectors in regions that would actively participate in:

- Planning of activities to implement strategic options
- Further identification of impacts of the strategic options other than those indicated in the ESMF study
- Selection of positive and negative social and environmental impacts other than indicated in studies
- In safeguarding the social and environmental aspects of the environment and
- Monitoring, evaluation as well as reporting of the implementation process of the strategic options and their mitigation measures

Woreda and Community Level

The consultation process at woreda and kebele/community level has focused on extracting information on the impact of implementation of the presupposed strategic options, their mitigation measures and soliciting of information on how to safeguard the society and the natural environment from possible adverse effects of the implementation measures.

Administrative processes such as contacting the woredas with official letters from Ministry of Environment and Forest and relevant regional offices have been carried out before conducting consultation at woreda and community level. Consultation facilitators had to contact the woreda administration offices to organize the consultation with woreda and community stakeholder. Community level consultation has been held with attendants drawn from representatives of existing ethnic groups, clan groups, social statuses, religious groups, gender groups, age groups, underserved communities, and educational groups. For consultation that has been carried out at woreda level, representatives of the agricultural, the energy, investment and other sectors found relevant in the course of communication. All the consultations at community level have been carried out after obtaining the consent of all participants (Annexed: list of participants).

The presupposed strategic options, their possible adverse and positive impacts and their presumed mitigation measures have been discussed with all stakeholders at woreda and community level after giving a brief introduction on the REDD+ process. Communities and woreda stakeholders concerns and recommendation have been summarized in the following table.

Social Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
Woreda	Participatory Forest Management / Forest Conservation	<ul style="list-style-type: none"> • People may be evicted from the PFM sites and become additional burden on Woreda admin 	<ul style="list-style-type: none"> • REDD+ projects should support the Woreda admin build its administration capacity through training and awareness
		<ul style="list-style-type: none"> • Conflict may arise between PFM and non PFM community members that could exceed the resolving capacity of the Woreda admin 	<ul style="list-style-type: none"> • REDD+ projects should assist the Woreda admin in resolving conflicts through conflict resolution mechanism
		<ul style="list-style-type: none"> • Restriction over social and natural resources, spiritual exercise, use and ownership rights may create social insecurity and scarcity chaos that may be beyond the controlling capacity of the Woreda 	<ul style="list-style-type: none"> • The PFM and forest conservation programs should allow activities that do not harm the forest environments (e.g. Spiritual ceremonies)
		<ul style="list-style-type: none"> • May serve as fertile ground for external forces (activists, NGO, traditional institutions, etc.) and influential individuals for instigating conflict and/or disagreement between the Woreda administrations and the local community 	<ul style="list-style-type: none"> • REDD+ projects should work with these influential organization and cultural institutes to avoid conflict and establish legal suing system to hold them accountable
		<ul style="list-style-type: none"> • May alter the working system of the Woreda community due to the incentive mechanism (e.g. Catchment rehabilitation, road construction, plantation scheme, adopting agricultural and other technologies etc.) 	<ul style="list-style-type: none"> • Encourage and train communities to engage in other income generating activities
		<ul style="list-style-type: none"> • Incentivizing and compensation systems may affect the collaboration 	<ul style="list-style-type: none"> • The Woreda admin in collaboration with the REDD+ project should

Social Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
		<p>culture of the Woreda community on collective job cultures and traditions (e.g. Debo, Edir, Jigi)</p> <ul style="list-style-type: none"> • The Woreda may lose a land and/or natural resources that it may use to conduct social and cultural services and/or benefit from and spend for socio-economic activities 	<p>encourage collective cultural works through participation</p> <ul style="list-style-type: none"> • The Woreda admin in collaboration with the REDD+ project plan not to affect these sites
	Agroforestry	<ul style="list-style-type: none"> • Social resistance on adopting agroforestry technologies may arise that could be beyond the controlling capacity of the Woreda 	<ul style="list-style-type: none"> • Intensive consultation and participation as well as training and awareness creation
		<ul style="list-style-type: none"> • The Woreda may not have the capacity to monitor and control agroforestry activities due to fragmented settlements 	<ul style="list-style-type: none"> • REDD+ projects should give training on Agroforestry practices
		<ul style="list-style-type: none"> • Mobilization of communities may be difficult due to diversified individual interests 	<ul style="list-style-type: none"> • REDD+ projects should give training on Agroforestry practices
	Area Closure	<ul style="list-style-type: none"> • Access restriction and control of trespassers over natural resources may create conflict between the Woreda and its community 	<ul style="list-style-type: none"> • Build the capacity of the Woreda to control area closures and enforce laws on trespassers
		<ul style="list-style-type: none"> • May create access restriction on the Woreda administration as well as the local communities by blocking access routes 	<ul style="list-style-type: none"> • Establish alternative routes
	Agricultural Intensification	<ul style="list-style-type: none"> • Lack of economic capacity of the Woreda community to purchase agri-inputs such as fertilizers and improved seeds 	<ul style="list-style-type: none"> • Incentivizing the community and subsidies

Social Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
		<ul style="list-style-type: none"> • Introduction of agricultural inputs that may damage the community's health 	<ul style="list-style-type: none"> • Establish local quarantine system and support from DA through simple trail
		<ul style="list-style-type: none"> • Lack of capacity and awareness to disseminate agricultural technologies and misuse arising thereof 	<ul style="list-style-type: none"> • Training and capacity building
		<ul style="list-style-type: none"> • May affect the natural and traditional farming system that is resilient to shocks and may create dependency syndromes 	<ul style="list-style-type: none"> • Maintain the local knowledge as much as possible
	Small-scale Irrigation	<ul style="list-style-type: none"> • Malaria and water borne disease outbreak beyond the control capacity of the Woreda 	<ul style="list-style-type: none"> • Support the Woreda in the fight against disease outbreak
		<ul style="list-style-type: none"> • Conflict with downstream users due to misuse of water resources from upstream users 	<ul style="list-style-type: none"> • Training on appropriate use of water resources by upstream users
	Afforestation/Reforestation	<ul style="list-style-type: none"> • Lack of capacity to mobilize communities 	<ul style="list-style-type: none"> • Build capacity through financial and logistic support
		<ul style="list-style-type: none"> • Social chaos and conflict from resettlement and relocation of local people 	<ul style="list-style-type: none"> • Plan and prepare with the local communities and the Woreda admin
		<ul style="list-style-type: none"> • May create social crisis by inducing illegal tree cutting, becoming a hiding place for outlaws and trespassers 	<ul style="list-style-type: none"> • Law enforcement and appropriate compensation
		<ul style="list-style-type: none"> • May become a place to harbor wild animals that would attack communities properties 	<ul style="list-style-type: none"> • Establish protection and early warning systems against attack
		<ul style="list-style-type: none"> • Can create administrative barrier between communities living in other sides of the plantation area and the Woreda administration 	<ul style="list-style-type: none"> • Construct alternative routes or provide transportation facility

Social Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
	Energy saving stoves	<ul style="list-style-type: none"> • Social resistance to new technology may become a work burden for the Woreda admiration 	<ul style="list-style-type: none"> • Intensive consultation and participation as well as training and awareness creation
		<ul style="list-style-type: none"> • Counterchecking by the Woreda admin may become difficult if manipulation and monopolization of the stove trade falls in the hands of community elites 	<ul style="list-style-type: none"> • Close follow up and monitoring of the manufacturing and distribution of the stoves
		<ul style="list-style-type: none"> • Conflict over benefit sharing if cooperatives are formed to handle stove production and selling 	<ul style="list-style-type: none"> • Empower the Woreda conflict resolution capacity through training on grievance redress mechanisms
	Law enforcement	<ul style="list-style-type: none"> • May create attitudinal resistance from trespassers and outlaws 	<ul style="list-style-type: none"> • Identify and approach suspected trespassers and engage them in planning and implementation of the REDD+ projects

Environmental Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
Woreda	Participatory Forest Management / Forest Conservation	<ul style="list-style-type: none"> • May drive communities to move to other forested areas looking for replacement of their loses causing deforestation and forest degradation of the Woreda forest resources not included in PFM and conservation 	<ul style="list-style-type: none"> • Provide communities with alternatives that would replace their resource needs
	Agroforestry	<ul style="list-style-type: none"> • Different land uses of the Woreda may fall under the influence of alien invasive species <ul style="list-style-type: none"> ○ Wetlands ○ Grazing lands ○ Farmlands 	<ul style="list-style-type: none"> • Conduct proper quarantine system before introduction of agroforestry species into the different land use types of the

Environmental Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
		<ul style="list-style-type: none"> ○ Water ponds, streams and rivers ○ Forest and shrub lands 	Woreda
	Area Closure	<ul style="list-style-type: none"> ● May aggravate setting of deliberate forest fire, illegal selective cutting and biodiversity destruction 	<ul style="list-style-type: none"> ● Intensive consultation, awareness creation and establishing fire protection structures
	Agricultural Intensification	<ul style="list-style-type: none"> ● Siltation of reservoirs 	<ul style="list-style-type: none"> ● Implement watershed management practice to protect reservoirs
		<ul style="list-style-type: none"> ● Runoff of pesticides and similar agricultural chemicals in the future. 	<ul style="list-style-type: none"> ● Protect the farmlands with integrated soil & water conservation (biological & physical) measures
		<ul style="list-style-type: none"> ● Fertilizer runoff and leaching; eutrophication and effect on human health 	<ul style="list-style-type: none"> ● Use of inputs (fertilizers and other chemicals) based on soil and plant tissue analysis for nutrient
		<ul style="list-style-type: none"> ● Increase pesticides Harms animal and human health by accumulating in soils and leaching into water bodies 	<ul style="list-style-type: none"> ● Use pesticides that are less harmful and protect the animals and safety precaution for human
	Small-scale Irrigation	<ul style="list-style-type: none"> ● May deplete surface and ground water resources 	<ul style="list-style-type: none"> ● Manage the watershed for recharging

Environmental Concerns			
Level	Strategic Options	Major Concerns	Suggested Solutions
		<ul style="list-style-type: none"> Water logging that may harbor bacteria's, disease pests and insects 	<ul style="list-style-type: none"> Treat water reservoirs
	Afforestation/Reforestation	<ul style="list-style-type: none"> Compromises the Woredas biodiversity 	<ul style="list-style-type: none"> REDD+ projects should take measure to protect sensitive and valuable biodiversity resources
		<ul style="list-style-type: none"> May overtake better land uses due to lack of proper study and awareness 	<ul style="list-style-type: none"> Apply plantation on degraded and marginalized land uses
		<ul style="list-style-type: none"> The Woreda may lose a significant proportion of the its vegetation if disease outbreaks attacking the monoculture (e.g. Ephids and scales in <i>Cupressus lustanica</i>) 	<ul style="list-style-type: none"> Establish early warning system and early measure in case indications occur
	Energy saving stoves	<ul style="list-style-type: none"> May prompt land degradation due to excavation of raw material resources for stoves construction 	<ul style="list-style-type: none"> Consultation, participation and awareness creation on environmental degradation and sustainable utilization of natural resources

Social Concerns of Consulted Communities and Proposed Mitigations	
Major Concerns	Suggested Solutions
<p>PFM, Forest Conservation, Area Closure</p> <ul style="list-style-type: none"> • Restriction over livestock pasture resource • Restriction over expansion of farmlands • Restriction over fuel, construction and farm implement forest resources • Conflict between local communities and protecting agents • Restriction over member of communities that traditionally use the forest for religious rituals • Obstruction of routes that connect communities living on either sides of the forest under PFM, area closure and conservation area • Hosts wild animals that may frequently attack livestock of surrounding communities • Small holder farmers may be evicted from their holdings for forest investment • Loss in land ownership may be induced (e.g. from private to government or vice versa) • Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest • Conflict over benefit sharing and marginalization of certain segments of local community • Conflict over skewed power relationship PFM may involve the exclusion of previous forest users from accessing forest resources 	<p>PFM, Forest Conservation, Area Closure</p> <ul style="list-style-type: none"> • Let the community use grass in cut and carry system • Intensify productivity per unit area through improved input use so that areal expansion of agriculture land • Supply improved cooking and baking stoves to the community which depends on forest for energy source • Support community to shift from wood to metal and/or blocks for construction • Ploughing system shift from traditional to semi-mechanized • Use customary conflict redress mechanism • Enhance the benefit of the community from the enclosed area • Compensate them enough • Allow communities to practice the ritual and religious practices in the forest as far as these do not affect the forest • Area enclosure should leave access routes for communities to move freely • If obstruction of access route is must, transport facility to use the other route must be arranged • Compensate the individual whose livestock eaten by the wildlife • Educate and train communities in the lowland areas about PFM • Assist communities in the low land areas to carry-out experience sharing visit in high land areas • Encourage self-dependency of the PFM groups through enabling them generate their own income from the forest management activities

Social Concerns of Consulted Communities and Proposed Mitigations	
Major Concerns	Suggested Solutions
	<p>or</p> <ul style="list-style-type: none"> • Inclusion of all community members to become PFM members • The PFM bylaw and the legal framework should define the power of the PFM leaders • Use customary conflict redress mechanism
<p>Agroforestry</p> <ul style="list-style-type: none"> • Highly fragment land use types of an individual household and may end up in highly reduced products • Difficult to introduce due to long gestation period of the trees • Traditional monoculture farming system • Create land computation with local community • Intensive care for the various agroforestry practices consumes the time and energy of household members <p>Afforestation/Reforestation</p> <ul style="list-style-type: none"> • From previous experience of large scale plantation people feel fear of loss of land ownership • Fire is a concerns that fire will increase and could affect neighboring properties 	<p>Agroforestry</p> <ul style="list-style-type: none"> • Integrate several types of agroforestry crops and trees to get increased products from diversified crops and trees • Select fast growing tree species • Research centers should work on improving (shortening) of the long gestation period of local tree species • The agroforestry system should integrate at least 2 and above 2 tree species with other crops • The household should manage the size of the land that can be managed by the family members • Use mechanized/ improved technology for time and energy efficiency reason <p>Afforestation/Reforestation</p> <ul style="list-style-type: none"> • Subsidize the seedling production cost through support by NGOs operating in the area • collect seed from local sources and raise them in community owned nursery • Compensate for what the community will lose from the land that to be devoted to reforestation/ afforestation • Allow cut and carry practice for the grass use • Do not plant fire prone tree species • Plant mixed species to minimize the risk of

Social Concerns of Consulted Communities and Proposed Mitigations	
Major Concerns	Suggested Solutions
<ul style="list-style-type: none"> • Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor. • High costs of seedling production to carry out plantation relative to enrichment plantings • Create access restriction • Physical relocation of local communities • May brings food insecurity as farm lands devoted to plantation 	<p style="text-align: center;">fire setting naturally or deliberately</p> <ul style="list-style-type: none"> • Train the community on forest fire risk and forest fire management • Construction fire break line between the forest and the properties of the community • Plant with wider spacing to allow undergrowth so that erosion will be prevented or minimal • Empower women and youth to play the role
<p style="text-align: center;">Intensive Agriculture</p> <ul style="list-style-type: none"> • Create farmers to depend on agricultural inputs like fertilizer • Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides • affects human health due to agricultural chemicals • Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women • Limited purchasing capacity of inputs (improved seeds, fertilizers seedlings) can limit potential gains • Climate Smart Agriculture (CSA) sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively • Only rich farmers may benefit from CSA 	<p style="text-align: center;">Intensive Agriculture</p> <ul style="list-style-type: none"> • Encourage agriculture intensification by the use of compost than chemical fertilizer especially for smallholder farmers • Use integrated pest management system which proved best than single types of pest management practice <p style="text-align: center;">Give awareness creation on health and safety of agro-chemicals</p> <ul style="list-style-type: none"> • Use integrated pest management system which proved best than single types of pest management practice • Use of PPE whenever applying agro-chemicals • Offer continuous and sustained education & awareness creation on the appropriate use of chemicals • Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers • Educate and train community on the benefit of CSA • Assist poor farmers technically and materially

Social Concerns of Consulted Communities and Proposed Mitigations	
Major Concerns	Suggested Solutions
<p style="text-align: center;">Small-scale Irrigation</p> <ul style="list-style-type: none"> • Prevalence of water-borne diseases (giardia, schistosomiasis, etc.) may increase • Increased exposure to malaria • Shortage or lack of water resource to downstream users • Conflicts between neighboring communities over water resource utilization • Incur cost to poor local communities 	<p style="text-align: center;">Small-scale Irrigation</p> <ul style="list-style-type: none"> • Educate and give sustainable training to the community on water and sanitation including water borne diseases • Enhance health facility for the treatment of water borne diseases if these are inevitably occurring • Avoid water logging through adequately draining • Disturb stagnant water continuously to break the breeding/life cycle of the insect • Cater mosquito net to the community • Implement wise and fair use of water • Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community • Harvest excessive water during the high moisture seasons for the later dearth period use • Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community
<p style="text-align: center;">Energy Saving Stoves</p> <ul style="list-style-type: none"> • May be difficult to supply the stoves in high demand areas due to long production-marketing chain • Stoves in high demand areas due to long production-marketing chain • Exploitation by middle men in the market chain • Time taking: long awareness creation and technology adoption process • Market problem may be a challenge • high transport, operation and maintenance costs and the length of time it takes to reach commercial centers 	<p style="text-align: center;">Energy Saving Stoves</p> <ul style="list-style-type: none"> • Supply of energy efficient cooking and baking gadgets at subsidized price • Avail electricity at affordable price by the community • Encourage farmers build corrugated/bricks roof house over hatch house so that there will be no fumigation • Educate and enhance the awareness of the community on modern style of living • Educate and give sustained training on the relative advantage of electricity/fuel efficient stove over the traditional stove

Social Concerns of Consulted Communities and Proposed Mitigations	
Major Concerns	Suggested Solutions
<ul style="list-style-type: none"> • Labor may be a problem for the family to harvest the forest products • Transporting to the market center may be a problem due to farmers financial capacity 	<ul style="list-style-type: none"> • Avail electricity and cooking/baking stoves at very attractive price • Solicit fund for the soonest project implementation e.g. fuel efficient cooking/baking stoves catering • Begin with the few number of farmers and gradually increase it • Build the capacity of community members for own community demand making of the stoves

Environmental Concerns of Consulted Communities	
Major Concerns	Suggested Solutions
<p>PFM, Forest Conservation, Area Closure</p> <ul style="list-style-type: none"> • May bring increased forest degradation from organized illegal cuttings • May call for total environmental destruction from mass mobilized cuttings and setting of forest fire • Attractive forest tenure and property right may increase land grabbing opportunity • May increase the value of forest land over agriculture land • Disrupts traditional tenure and forest management systems • Change in land use type may be induced (e.g. from agriculture to forest or vice versa) • Create economically driven forest mismanagement that may lead to forest degradation • May instigate deforestation from marginalized local communities and/or little benefiting PFM members • Low economic value forests in lowland areas 	<p>PFM, Forest Conservation, Area Closure</p> <ul style="list-style-type: none"> • Avail forest products and non-timber forest products which the community depends on the forest from other sources • Share benefit to the community from the income accrued due to the protection of forest • Increase the awareness of the community through training and education • Law enforcement should be in place • Allow community use the resource without cutting the trees e.g. for ritual, cultural practices, • Educate and train the community on the value of the forest • Prepare enough through capacity building (human & material) to suppress fire incase fire is set • Empower indigenous grievance redress mechanisms • Implement effective law enforcement to

Environmental Concerns of Consulted Communities	
Major Concerns	Suggested Solutions
<p>may not attract PFM organization</p> <ul style="list-style-type: none"> • Coffee farming in the forest has already degraded biodiversity and further permit of coffee farming in the forest may worsen the condition • Stakeholder and community may not be mobilized as required • Tragedy of the commons 	<p>deter land grabbing</p> <ul style="list-style-type: none"> • Government should implement land use planning • Synchronize traditional and modern land use system get the best out of the combination • Compensation planting required if change is from forest to agricultural lands • Compensation planting required if change is from forest to agricultural lands • Hybrid of PFM and Traditional forest management with scientific management so that forests utilized based on forest management plan
<p style="text-align: center;">Agroforestry</p> <ul style="list-style-type: none"> • Quarantined agroforestry species may become invasive and damage the natural environment • May be less effective in cases where mono culture practice more benefits the environment (e.g. in dissected landscapes) 	<ul style="list-style-type: none"> • PFM should encompass all community members with equal benefit sharing • Enhance the economic value of the lowland forests through forest industry installation • Strict control over the expansion of coffee planting in the forest • Put in place where the undergrowth and natural regeneration of tree species allowed to grow • Put in place the urges maintenance of minimum number of indigenous tree species where coffee is farmed • Build own capacity of fire prevention system • Educate people • Select appropriate species for the purpose <p style="text-align: center;">Agroforestry</p> <ul style="list-style-type: none"> • Establish strong quarantine centers at national and all regional government levels • Integrate several crops and tree species in the agroforestry practices • Integrate in the agroforestry system crops with

Environmental Concerns of Consulted Communities	
Major Concerns	Suggested Solutions
<ul style="list-style-type: none"> • Where the tree and crop or livestock components overlap in their use of resources, competition may lead to reduced productivity (e.g. Competition for water between tree and crop components is likely to limit productivity) 	<p>low moisture demand</p> <ul style="list-style-type: none"> • Harvest water during the rainy water for dearth period use • Firebreak structure and equipment should be in place • Educate and enhance the awareness of community • Fence to exclude encroachment • Do not come close to the habitat/breeding place of wildlife • Share benefit from the wildlife hunting/ ecotourism so that community feels ownership over the resource
<ul style="list-style-type: none"> • Aggravate environmental degradation from setting of fires • Aggravate illegal cuttings and destruction of regenerating biodiversity • Increase conflict between wildlife & humans & increase crop pests (birds, mammals) • Risk of monoculture plantation • Compromise to local biodiversity • Risk of harbor of crop pests in reforested area • Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor • Poorly designed and mass mobilized conservation measures aggravate soil erosion 	<ul style="list-style-type: none"> • integrated crop pest management practice • Plant mixed species • Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation • Plant local/indigenous tree species • Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation • Use integrated crop pest management practice • Allow undergrowth through wider space planting • Install soil and water conservation practice (physical & biological) to harness erosion • Implement conservation measures using experts/well trained person only • Enforce land-use plan to come into force
<p>Small-scale Irrigation</p> <ul style="list-style-type: none"> • Siltation of reservoirs • Fertilizer runoff and leaching; eutrophication and effect on human health 	<p>Small-scale Irrigation</p> <ul style="list-style-type: none"> • Implement watershed management practice to protect reservoirs • Protect the farmlands with integrated soil &

Environmental Concerns of Consulted Communities	
Major Concerns	Suggested Solutions
<ul style="list-style-type: none"> • Runoff of pesticides and similar agricultural chemicals • Eroded agricultural genetic resources essential for food security in the future. • Increased pesticides harms animal and human health by accumulating in soils and leaching into water bodies 	<ul style="list-style-type: none"> • water conservation (biological & physical) measures • Use of inputs (fertilizers and other chemicals) based on soil and plant tissue analysis for nutrient • Treat water before using • Protect the farmlands with integrated soil & water conservation (biological & physical) measures
<ul style="list-style-type: none"> • Salinization and regimes of underground water • Inadequate drainage and over-irrigation causes water logging • Lowering of water tables • Water diversions for agriculture are a major problem for many aquatic species. <p style="text-align: center;">Energy Saving Stoves</p> <ul style="list-style-type: none"> • May increase demand for firewood and charcoal due to wider use outside of the project area which intern aggravate deforestation and forest degradation 	<ul style="list-style-type: none"> • Never erode the local genetic resource; work side by side on both local and improved crop varieties to enhance food security • Use personal protective equipment whenever applying chemicals • Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops • Continuous leaching of the farms with water • Irrigate the farms based on the soil water requirement analysis • Use drip irrigation to avoid both under and over irrigating • Implement practices that recharge ground water (watershed management, soil & water conservation structure) • Diversion of water to only the threshold level beyond which aquatic live do not affected <p style="text-align: center;">Energy Saving Stoves</p> <ul style="list-style-type: none"> • Diversify the type of energy saving stoves like solar, kerosene and electric stoves • Urge the Government to expand the grid system in the project areas

Environmental Concerns of Consulted Communities	
Major Concerns	Suggested Solutions
<p style="text-align: center;">Afforestation/Reforestation</p> <ul style="list-style-type: none"> • Exotic species may dominate as these are fast growing than the indigenous • Environmental degradation during harvesting and transporting time • Adverse micro-climate modification after harvesting • The act induces more numbers of charcoal users which means more carbon emission • Environmental pollution by particulate matters from the use of charcoal • High calorific value wood plantation leads to monoculture that brings about loss in biodiversity • Fire risks from the tree species planted for charcoal production as they are susceptible to ignition 	<p style="text-align: center;">Afforestation/Reforestation</p> <ul style="list-style-type: none"> • Researching on fast growing indigenous tree species • Employ semi-mechanized system during harvesting • Harvest based on the rotation period (do not harvest all at a time) <p>Sequesterate the emitted carbon by planting trees of environmental value (e.g. for carbon financing, ecosystem protection)</p> <ul style="list-style-type: none"> • Use charcoal gadgets with chimney and lid that prevent entry of particulate into the environment • Allow natural regeneration under the plantation • Have different plantation sites for biodiversity and environmental protection • Construct fire breaks between blocks of forest • Build capacity (human and material) to suppress fire in case it sets

Anne 3: Lists of People participated in the consultations (sample only)

Name	Sex	Mobile Number	Region	Wereda	Kebele
Alemneh Asfa	Male	0916014143	SNNPR	Wondo Genet	
Dawit Dorimi	Male	0916030221	"	"	
Tamiru Tefera	Male	0916098820	"	"	
Mulugeta Muse	Male	0911959997	"	"	
Yisak Harkiso	Male	0916868838	"	"	
Fikre Haile	Male	0923876575	"	"	
Eneho Berhanu	Male	0916130606	"	"	
Girma Hankana	Male	0937269899	"	"	
Agegneu Ermias	Male	091613902	"	"	
Asnske Mengistu	Male	0916131094	"	"	
Konse Anno	Male	0926174954	"	"	
Mekonen Sarmela	Male	0911044811	"	"	
Selamawit Abera	Female	0916380094	"	"	
Bezaye Girma	Female	0912006171	"	"	
Sindu Bogale	Female	0911075128	"	"	
Saba Admasu	Female	0913189864	"	"	
Tadele Sebsibe	Male	0911905502	"	"	Wesha Soyama
Kebede Kuyano	Male	0911359234	"	"	"
Yonas Eyamo	Male	0926879790	"	"	"
Jemayinesh W/Gebrel	Female	0926237388	"	"	"
Tigist Arshine	Female	0927002570	"	"	"
Betelhem Abiyu	Female	0916665514	"	"	"
Markos Shita	Male	0912257857	"	"	"
Donka Doyamo	Male	0916614410	"	"	"
Mateos Shoso	Male	0916128063	"	"	"
Abera Kebede	Male	0934617411	"	"	"
Didamo Hamara	Male	1926591897	"	"	"
Getachew Taye	Male	0913538799	"	"	"
Atnafu Lema	Male	0916014685	"	"	"
Meskerem Mulatu	Female	-	"	"	Wetera Kechema

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Emesh Takele	Female	-	"	"	"
Tuse Lelamis	Male	-	"	"	"
Gosaye Tefera	Male	0949157733	"	"	"
Wondimu Goboro	Male	-	"	"	"
Sanbako Feyisa	Male	-	"	"	"
Lenidamo Leglamo	Male	-	"	"	"
Matiwos Fiche	Male	0911789288	"	"	"
Demesa Duuse	Male	-	"	"	"
Niguse Tuse	Male	-	"	"	"
Engidalem Tuse	Male	-	"	"	"
Fikre Beta	Male	-	"	"	"
Kirubel Ashebir	Male	-	"	"	"
Gezahegn Geremew	Male	0917919133	"	Decha	
Ashebir Wolde	Male	0912328634	"	"	
Zekarias Mekuria	Male	0913502030	"	"	
Shimelis Getachew	Male	0911533706	"	"	
Atinafu Abate	Male	0917477316	"	"	
Lisanework Geleta	Male	0917936440	"	"	
Kemal Muhye	Male	-	"	"	
Admasu Adaro	Male	0935129297	"	"	
Tamiru W/Gebrel	Male	0917919910	"	"	
Marino Piosagot	Male	0917405011	"	"	
Tilahun Asfaw	Male	0916120310	"	"	
Abiyo Atte	Male	0917103991	"	"	
Asres Ademo	Male	0910157018	"	"	
Endale Keekamo	Male	0912686664	"	"	
Abuye Wodajo	Male	0917060153	"	"	
Yohanisi Alemu	Male	0937145308	"	"	
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Tesfanesh Mekuria	Female	0917748734	"	"	
Mekonen Uta	Male	-	"	"	Gedam
Brhanu W/ Mical	Male	-	"	"	"
Alemayehu G/ Mical	Male	-	"	"	"
Mitiku G/ Silase	Male	-	"	"	"
Belachew G/ Silase	Male	-	"	"	"
Getachew Wuleta	Male	-	"	"	"
Alemayehu Adelo	Male	-	"	"	"
Girma Mekonein	Male	-	"	"	"
Ayalew Kebede	Male	-	"	"	"
Brhanu Teka	Male	-	"	"	"
Kochito Belete	Male	-	"	"	"
Ademu W/ Senbet	Male	-	"	"	"
Aregash Ago	Female	-	"	"	"
Aregash G/ Mical	Female	-	"	"	"
Aregash Asefa	Female	-	"	"	"
Wuditu Wudeno	Female	-	"	"	"
Abebech Kasa	Female	-	"	"	"
Ejgayehu Bekele	Female	-	"	"	"
Alemitu Ado	Female	-	"	"	"
Azalech Abebe	Female	-	"	"	"
Wuditu Tasfaye	Female	-	"	"	"
Aselefech Asefa	Female	-	"	"	"
Tarikua Haile	Female	-	"	"	"
Azalech Tadese	Female	-	"	"	"
Bekelech Belete	Female	-	"	"	"
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Abate Sisay	Male	0935134181	"	"	"
Geremew W/Mikel	Male	0922746674	"	"	"
Mesfin Mekonen	Male	-	"	"	"
Adamu Tafese	Male	0939319378	"	"	"
Zingbu Gero	Male	0935171689	"	"	"
Asaminew Maro	Male	0927584735	"	"	"
Ayalew Tafese	Male	0928250191	"	"	"
Gizachew Asefa	Male	0943594511	"	"	"
Bogale Gizaw	Male	0923346929	"	Masha	
Amsalu Haile	Male	0917111455	"	"	
Berhanu Zeleke	Male	0917830831	"	"	
Tamru Digo	Male	0917830240	"	"	
Aweke Gallo	Male	0917101587	"	"	
Tekle Shauleno	Male	0947094842	"	"	
Kifle Gebre	Male	0917058534	"	"	
Adisu Ambelo	Male	0920518001	"	"	
Amare Choro	Male	-	"	"	
Adinew Shetano	Male	0917830829	"	"	
Tewodros Sahile	Male	0910976850	"	"	
Tekaligne Achame	Male	0924808690	"	"	
Dejene Deseno	Male	0917302934	"	"	
Mesfin Abera	Male	0912410356	"	"	
Tekaligne Achono	Male	0917111554	"	"	
Abiyu Kasa	Male	0917753436	"	"	
Yewbnesh Mamo	Female	0912446436	"	"	
Asnakech Kodo	Female	0910296234	"	"	
Mesay Kebede	Female	0910652676	"	"	
Zenebech Zeleke	Female	0917830222	"	"	
Achamyesh Ambcho	Female	0917111547	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Girma Senbeto	Male	-	"	"	Uwa
Wasihun Mamo	Male	-	"	"	"
Biritu Mamo	Female	-	"	"	"
Asefa Daino	Male	-	"	"	"
Sibatu Merga	Male	0917310913	"	"	"
Azene Haile	Male	-	"	"	"
Ayele Gobena	Male	-	"	"	"
Haile Gelito	Male	-	"	"	"
Tariku Awash	Male	-	"	"	"
Asrat Asres	Male	0923428145	"	"	"
Firehiwot Emru	Female	0917831624	"	"	"
Astarekech Tadese	Female	0923346478	"	"	"
Mulugeta Dessu	Male	0923346554	"	"	Keja
Endeshaw Shajo	Male	-	"	"	"
Emo Bishacho	Male	-	"	"	"
Awassho Harito	Male	-	"	"	"
Debebe Eshetu	Male	0923070604	"	"	"
Shibru Tola	Male	0933220719	"	"	"
Eshetu Deseno	Male	0925285257	"	"	"
Teshome Digo	Male	0925717821	"	"	"
Gizaw Gebre	Male	0945641622	"	"	"
Girma Fekadu	Male	0917310911	"	"	"
Alemayehu Gebito	Male	0923346973	"	"	"
Abezash Mekuria	Female	-	"	"	"
Asnakech Tekaligne	Female	-	"	"	"
Tadelech Gebo	Female	-	"	"	"
Mohammed Ahmed	Male	0917152002	"	Sheko	
Tatek Asefa	Male	0912376864	"	"	
Ermias Tosset	Male	0917333056	"	"	
Akalie Mekonen	Male	0949013582	"	"	
Argaw Sulamo	Male	0927539772	"	"	
Endale Belayneh	Male	0924690782	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Teshome Abraha	Male	0917310404	"	"	
Goji Kaisa	Male	0913821046	"	"	
Mengistu Mekonen	Male	0917328593	"	"	
Ali Shukralah	Male	0921214238	"	"	
Zerihun Kelbi	Male	0910970655	"	"	
Belachew Abiko	Male	0911762508	"	"	
Alemayehu Gebre	Male	0924129522	"	"	
Tegenu Gizaw	Male	0919142182	"	"	
Wendmagegne Atimo	Male	0917331334	"	"	
Alemayehu Getachew	Male	0934268030	"	"	
Serkalem Muhie	Female	0912381671	"	"	
Ibtistan Getahun	Female	0935174309	"	"	
Messaye Mohammed	Female	091356029	"	"	
Sintayehu Muche	Female	0918641398	"	"	
Asefu Gizachew	Female	0918318725	"	"	
Almlesh Ejigu	Female	0917154225	"	"	
Aster Tsegaye	Female	0928255111	"	"	Giz Meret
Mulu Hasen	Female	0934788086	"	"	"
Askal Abebe	Female	0940260268	"	"	"
Ali Adem	Male	0927556309	"	"	"
Birara Adese	Male	0917330317	"	"	"
Legese Tefera	Male	0917310006	"	"	"
Alemu W/ Mariam	Male	-	"	"	"
Ibrahim Seid	Male	0917536142	"	"	"
Bila Haile	Male	0917347087	"	"	"
Tesfaw Gebeyehu	Male	0932022339	"	"	"
Zelalem Takele	Male	0917865980	"	"	"
Dereje Bayu	Male	0913732662	"	"	Shimi
Pawlos Markos	Male	0916559664	"	"	"
Abebe Andarge	Male	0917598567	"	"	"
Lukas Domo	Male	0931028363	"	"	"
Samuel Gomerka	Male	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Dachu Zilu	Male	0921214233	"	"	"
Daniel Baykif	Male	-	"	"	"
Zan Paulos	Male	0928575396	"	"	"
Alemayehu Haile	Male	-	"	"	"
Temesa H/Mariam	Male	-	"	"	"
Werkit Arega	Female	-	"	"	"
Fantanesh Yimer	Female	0936092470	"	"	"
Asegedech Abegaz	Female	-	"	"	"
Sisay Abera	Male	0911166077	Oromia	Anchar	
Yehualshet	Male	0922772424	"	"	
Mohammed Yuye	Male	0912782433	"	"	
Ababu Tasew	Male	0915242882	"	"	
Yeyis Takele	Male	0927866581	"	"	
Ednana Ushra	Male	0910420203	"	"	
Gashaw Haile	Male	0935655753	"	"	
Abaynesh Hailu	Female	0922073922	"	"	
Almaz Markos	Female	0935835794	"	"	
Gelila Jemal	Female	0911549799	"	"	
Ashu Tamirat	Female	0924103836	"	"	
Muliye Tilaye	Female	0927306608	"	"	
Mohammed Hasen	Male	0924013700	"	"	
Tadesse Jimas	Male	0910746931	"	"	
Abdurahman Dadi	Male	0922772443	"	"	
Ibrahim Kasim	Male	0934923966	"	"	
Alfanur Ahmed	Male	0931286382	"	"	
Sultan Hussien	Male	0923972411	"	"	
Tilahun Shimelis	Male	0970693458	"	"	
Musa Mohammed	Male	0921758998	"	"	
Ziad Ahmed	Male	0921184012	"	"	
Hamid Hawaso	Male	0923752177	"	"	
Abdurahman Kedir	Male	0937662476	"	"	
Yidnek Wondimu	Female	-	"	"	Dindin

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Alemnesh Gebre	Female	-	"	"	"
Tateme Fikre	Male	0919557746	"	"	"
Wegayehu W/Semaiat	Female	-	"	"	"
Ahmed Mohammed	Male	-	"	"	"
Nunesh Zeleke	Female	0937483486	"	"	"
Gosa Tamrat	Male	-	"	"	"
Yehualashet Roge	Male	-	"	"	"
Mohammed Sheke	Male	0927306576	"	"	"
Ibsa Abdelle	Male	-	"	"	"
Mohammed Ahmed	Male	-	"	"	"
Abiyi Ode	Male	-	"	"	"
Bayush Gisile	Female	-	"	"	Midgdu
Demeke Boni	Male	-	"	"	"
Amsale Haile	Female	-	"	"	"
Yesunesh Leul	Female	-	"	"	"
Selamawit Lule	Female	0922045033	"	"	"
Hasen Hussien	Male	0931458408	"	"	"
Ayele Nigatu	Male	-	"	"	"
Mesfin Lule	Male	0928206619	"	"	"
Neguse Abate	Male	-	"	"	"
Dagnachew Yosef	Male	-	"	"	"
Sinke Abate	Female	-	"	"	"
Hide Hullo	Female	-	"	"	"
Dinku Bekele	Male	-	"	"	"
Weynehareg Antewen	Female	-	"	"	"
Hasen Bedeso	Male	0916005935	"	Dodola	
Hasen Woliyi	Male	0920355535	"	"	
Maruf Mesud	Male	0921359719	"	"	
Sultan Genemo	Male	0913467343	"	"	
Mustafa Guye	Male	0910959889	"	"	
Yilma Zeleke	Male	0920171078	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Birhanu Wabe	Male	0915830419	"	"	
Bezabih W/Samayot	Male	0926509987	"	"	
Kebede Aman	Male	0912083126	"	"	
Debebe Mekonen	Male	0913624255	"	"	
Gizaw Mengiste	Male	0929446561	"	"	
Tegenie Mulugeta	Male	0933850242	"	"	
Jemal Gerchu	Male	0925724294	"	"	
Leyla Neguse	Female	0910089324	"	"	
Genet Bekele	Female	0920068189	"	"	
Hajo Haji	Female	0912265042	"	"	
Fozia Kedir	Female	0920067974	"	"	
Jemila Mengistu	Female	0920174404	"	"	
Imayu Ayano	Female	0924560742	"	"	Deneba
Mituwat Taso	Female	0927292569	"	"	"
Jamarya Funi	Female	0925391716	"	"	"
Almaz Sobaga	Female	0922671882	"	"	"
Ansha H/Mikail	Male	0920068434	"	"	"
Goriba Herbo	Male	0912975318	"	"	"
Barso Dube	Male	0928038272	"	"	"
Ibrahim Jarso	Male	0926473066	"	"	"
Duba Gero	Male	0910254087	"	"	"
Gabayo Simes	Male	0929324998	"	"	"
Shibru Bariso	Male	0916018251	"	"	"
Eribo Guye	Male	0921358779	"	"	"
Kubri Fato	Male	0912757123	"	"	"
Umer Haju	Male	0922701912	"	"	"
Kadir Imiy	Male	0916063730	"	"	"
Jamal Jarse	Male	0924935911	"	"	"
Mohamommed Amin	Male	-	"	"	"
Hamdicho Guyyee	Male	0949294687	"	"	"
Hamu Fato	Male	-	"	"	Berisa
Muhammed Biftu	Male	0910821193	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Ibrahim Anfote	Male	0910976951	"	"	"
Aman Roba	Male	0938112106	"	"	"
Ahmed Galato	Male	0913895328	"	"	"
Aman Haji	Male	0923720874	"	"	"
Kediro Gelgalu	Male	0922701896	"	"	"
Abdurazak Aljalil	Male	0921711759	"	"	"
Keki Hasen	Male	0945814466	"	"	"
Kemaria Koji	Female	0912097511	"	"	"
Amane Gamado	Female	-	"	"	"
Taiba Judo	Female	-	"	"	"
Husen Kalilo	Male	0921089258	"	Dinsho	Zalo Abebo (02)
Abdure Kalil	Male	-	"	"	"
Ibrahim Kalil	Male	0921394981	"	"	"
Birka Kadir	Male	-	"	"	"
Aliyi Sheko	Male	0916864427	"	"	"
Abas Adamo	Male	0921451137	"	"	"
Ahmad K/Adam	Male	0939519015	"	"	"
Mohammed K/Adam	Male	0912767166	"	"	"
Aman Mohammed	Male	0912315412	"	"	"
Kadi H/Adam	Male	0912315321	"	"	"
Rukia Abda	Female	-	"	"	"
Hawa Abdo	Female	-	"	"	"
Muslima Mahmud	Female	-	"	"	"
Kemar H/Adam	Male	0912315306	"	"	Haro Soba
Kasim Wagritu	Male	0913926716	"	"	"
Amino H/Hussen	Male	0921089736	"	"	"
M/Jemal H/Said	Male	0913968680	"	"	"
H/Kadir Tufo	Male	-	"	"	"
Shlfaho Abdo	Male	0922050436	"	"	"
Mohammed Kadir	Male	0910362386	"	"	"
Alo Abdo	Male	0920357895	"	"	"
Locho Sube	Female	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Amane Hagahiyyi	Female	-	"	"	"
Yeshi Yesuf	Female	0937822645	"	"	"
Asefa Adeto	Male	0960959587	SNNPR	Arba Minch Zuria	
Kasahun Degeta	Male	0923859857	"	"	
Tamiru Tesfaye	Male	0916277771	"	"	
Asini Adamu	Male	0913849745	"	"	
Tobe Yemo	Male	0920977998	"	"	
Dawit Hencho	Male	0913604442	"	"	
Sisay Welda	Male	0910653060	"	"	
Addisu Getu	Male	0910413322	"	"	
Abel Boriza	Male	0910726809	"	"	
Hareguwa Tesfaye	Female	0916064142	"	"	
Muluken Gobena	Male	0910094177	"	"	
Degife Demisse	Male	0913066729	"	"	
Daniel Karma	Male	0926386616	"	"	
Solomon Wanke	Male	0934238843	"	"	
Bekele Amha	Male	0939808286	"	"	
Maledworku Tumato	Female	0913785359	"	"	
Tesfu Abire	Male	0916301023	"	"	
Debalke Bocho	Male	0923488558	"	"	
Moges Markon	Male	0936495841	"	"	
Engida Yigezu	Male	0910451940	"	"	
Ayele Adamu	Male	0916854433	"	"	Kanchema Ocholo
Kama Kajuro	Male	0916854433	"	"	"
Bogale Koso	Male	0913518916	"	"	"
Mesfin Armacho	Male	-	"	"	"
Guza Gushe	Male	0924704564	"	"	"
Gobeze Bushe	Male	-	"	"	"
Matios Sherko	Male	0910403509	"	"	"
Goleze Gule	Male	0921223478	"	"	"

ESMF for the implementation of REDD+ program in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
Misrak Tobe	Female	0913688533	"	"	"
Sheruru Seefu	Female	-	"	"	"
Kesemua Mohamed	Female	0924705962	"	"	"
Mulunesh Ticharo	Female	0934760363	"	"	Zeise Elgo
Workinesh Asefa	Female	-	"	"	"
Aselefech Koto	Female	-	"	"	"
Mulunesh Charkos	Female	-	"	"	"
Wolega Wodajo	Male	0912781789	"	"	"
Mengistu Gudisa	Male	-	"	"	"
Eyasu Baygo	Male	-	"	"	"
Shibru Gebre	Male	-	"	"	"
Tadesse Kungo	Male	-	"	"	"
Tegegn Tuchaso	Male	-	"	"	"
Wormale Wosso	Male	-	"	"	"
Abayneh Yilma	Male	-	"	"	"
Ojul Awthe	Male	0917050026	Gambella	Abebo	
Biyi Ogetu	Male	0917486603	"	"	"
Omod Kwot	Male	0912489116	"	"	"
Alebachew Tesema	Male	0917486478	"	"	"
Teketel Haile	Male	0919114838	"	"	"
Abang Obang	Female	0948943707	"	"	"
Andualem Misganaw	Male	0913852529	"	"	"
Othow Agwa	Male	0917486522	"	"	"
Othow Okello	Male	0917834215	"	"	"
Okugn Odol	Male	0917939057	"	"	"
Ojulu Odolla	Male	0925850239	"	"	"
Didumo Oguol	Male	0923347847	"	"	"
Othow Obang	Male	0927548167	"	"	"
Othow Ochan	Male	0917834854	"	"	"
Will Otwelo	Female	-	"	"	"
Ajulu Uriaw	Female	-	"	"	"
Abenba Aliye	Female	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Ajulu Uman	Female	-	"	"	"
Acacho Ubang	Female	-	"	"	"
Uman Omod	Male	-	"	"	"
Omod Ubanba	Male	-	"	"	"
Omod Ojulu	Male	0927544445	"	"	"
Omod Omo	Male	-	"	"	"
Adi Ololu	Male	-	"	"	"
Obangi Ojulu	Male	-	"	"	"
Umad Ojulu Alara	Male	-	"	"	"
Ugad Oujulu Ogado	Male	-	"	"	"
Abagera Ulok	Male	-	"	"	Choboker
Obangi Uman	Male	-	"	"	"
Ojulu Ublong	Male	-	"	"	"
Koronela John	Male	0924906124	"	"	"
Achemo Umad	Male	0935143820	"	"	"
Ojulu	Male	0945031112	"	"	"
Ojora Ofom	Male	0946517415	"	"	"
Awele Giro Guware	Female	-	"	"	"
Ariadi Ofow	Female	-	"	"	"
Abiwo Opity	Female	-	"	"	"
Ajulu Chala	Female	-	"	"	"
Esamu Umer	Male	0913223452	Oromia	Harena Buluk	
Kalid Rube	Male	0913394099	"	"	
Muhammed Adem	Male	0922510258	"	"	
Isa Kaso Aman	Male	0940313699	"	"	
Hussen Muhammed	Male	0926136826	"	"	
Abebe Bekele	Male	0920943409	"	"	
Merga Geda	Male	0916841749	"	"	
Ramates Ulariyo	Male	0925661031	"	"	
Hussen Aliyu	Male	0932312131	"	"	
Kadir Adem	Male	0920381915	"	"	
Mohammed Hussen	Male	0919264464	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Ayenew Bekele	Male	0912451152	"	"	
Sufian Abdo	Male	0922758285	"	"	
Abdu Ahu	Male	0926627374	"	"	
Taiba Abdulahi	Female	0932143352	"	"	
Nagasso Luke	Male	0912812604	"	"	
Shewangizaw Haile	Male	0913601216	"	"	
Tigist Milku	Male	0921097559	"	"	
Aman Ahmed	Male	0913352066	"	"	Sodo Welmel
Usman Mume	Male	-	"	"	"
Derga Hussien	Male	-	"	"	"
Derga Hassen	Male	-	"	"	"
Aman Abdulkadir	Male	-	"	"	"
Mesfin Merga	Male	-	"	"	"
Seyfu Adem	Male	-	"	"	"
Redwan Abafita	Male	0922763126	"	"	"
Jemal Abdulwahid	Male	0927909065	"	"	"
Gursuma Kedir	Female	0932322092	"	"	"
Fatuma Aliye	Female	-	"	"	"
Hawa Kedir	Female	-	"	"	"
Teyiba Teyib	Female	-	"	"	"
Zubeyda Hashim	Female	-	"	"	Shawe
Amane Adem	Female	-	"	"	"
Shemsia Ansha	Female	0946583935	"	"	"
Temima Hunde	Female	-	"	"	"
Esmael Adem	Male	-	"	"	"
Umer Kedir	Male	0915745531	"	"	"
Mahmud Adem	Male	0927314010	"	"	"
Ahmed Adem	Male	0922672263	"	"	"
Malim Hussien	Male	-	"	"	"
Umer Buta	Male	-	"	"	"
Hussien Roba	Male	0924327520	"	"	"
Hussein/Mohammed	Male	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Getaneh Asefa	Male	-	Gambella	Godere	
Kedir Yesuf	Male	-	"	"	
Sahle Biza	Male	-	"	"	
Tesfa Gefersu	Male	-	"	"	
Bekelech Tezera	Female	-	"	"	
Etagegnehu Chane	Female	-	"	"	
Bekelech Angelu	Female	-	"	"	
Mohamed Seid	Male	-	"	"	
Dejene Tarekegne	Male	-	"	"	
Tesfaye Abera	Male	-	"	"	
Genet Nigusea	Female	-	"	"	
Tesfa Gerso	Male	-	"	"	
Mesfin Kasa	Male	-	"	"	
Dejene Abebe	Male	-	"	"	
Dagim Tinte	Male	-	"	"	
Fantaw Wolde	Male	-	"	"	
Bizuayehu Siraw	Female	-	"	"	
Dechasa Gudeta	Male	-	"	"	
Yirgalem Wudu	Female	-	"	"	
Adisu Kasu	Male	-	"	"	Gelesha
Markos Wonji	Male	-	"	"	"
Enkias Lemket	Male	-	"	"	"
Petros Giltot	Male	0948941646	"	"	"
Aslot Bukoy	Male	-	"	"	"
Samuel Koresh	Male	-	"	"	"
Yakob Wagnat	Male	-	"	"	"
Zeinba Aron	Female	-	"	"	"
Gerna Wadiyo	Female	-	"	"	"
Merima Ayta	Female	-	"	"	"
Bereket Adisu	Female	-	"	"	Goshini
Tinbit Ramati	Female	-	"	"	"
Tseon Teshome	Female	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Liya Markos	Female	-	"	"	"
Tobel Tekele	Male	0946511373	"	"	"
Enkasia Yohanes	Male	0920333348	"	"	"
Selamawit Werke	Female	-	"	"	"
Tut Dawit	Male	-	"	"	"
Libridos Bombom	Male	09489441147	"	"	"
Kibreal Eqrke	Male	-	"	"	"
Daniel Kuamila	Male	-	"	"	"
Yona Kamila	Male	-	"	"	"
Gorume Wodajo	Male		Oromia	Yayu	Wobo
Kebede Hordofa	Male	-	"	"	"
Teka Dabola	Male	-	"	"	"
Yadata Doba	Male	-	"	"	"
Fetene Bulcha	Male	-	"	"	"
Geremwe Nuru	Male	-	"	"	"
Firdi Kena	Male	-	"	"	"
Nuru Gebeyhu	Male	-	"	"	"
Adugna Gebeyhu	Male	-	"	"	"
Tekalegn Lema	Male	-	"	"	"
Getachew Tesema	Male	-	"	"	"
Getu Befirdu	Youth	-	"	"	"
Yeshi Tesfaye	Female	-	"	"	"
Almaz Nura	Female	-	"	"	"
Rabiya Befekadu	Female	-	"	"	"
Bruktawwit Hailu	Female	-	"	"	"
Shitaye Debisa	Female	-	"	"	Gechi
Asiya Nasir	Female	-	"	"	"
Birhane Jenber	Female	-	"	"	"
Tafesu Worku	Female	-	"	"	"
Denku Oljira	Female	-	"	"	"
Zumera Dhisa	Female	-	"	"	"
Amirasa Eliyas	Female	-	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Mitiku Tiruneh	Male	-	"	"	"
Habtamu Tafese	Male	0919122784	"	"	"
Asefa Amente	Male	0948969076	"	"	"
Ibrahim Kedir	Male	0919105619	"	"	"
Bekum Nurfath	Male	0919119085	"	"	"
Atinafu Tadesse	Male	-	"	"	"
Tamsgene Ayana	Male	-	"	"	"
Bula Bekele	Male	0932459849	"	"	"
Adisu Etefa	Youth	0917964494	"	"	"
Sisay Tarekegn	Youth	0923336604	"	"	"
Nisro Hussen	Youth	0917464371	"	"	"
Sukare Abdu	Female	-	"	"	Yoye 01
Birhane Morke	Female	-	"	"	"
Birhane Tariku	Female	0921061558	"	"	"
Ayahush Tesema	Female	-	"	"	"
Aster Gizaw	Female	0917310081	"	"	"
Tadalech Fita	Female	0913292664	"	"	"
Melese Manfo	Male	-	"	"	"
Tesfa Belay	Male	0917806452	"	"	"
Fikadu Hailu	Male	0912319299	"	"	"
Temegnu Borena	Male	0917117248	"	"	"
Meressa Geisa	Male	0917026616	"	"	"
Tesfaye Kebede	Male	0911756394	"	"	"
Tesfaye Yadesa	Male	0917025595	"	"	"
Fedesa Feyesa	Male	0912117086	"	"	"
Etenesh Abedeta	Youth	0932439106	"	"	"
Tahir Siraje	Youth	0917118452	"	"	"
Laila Kali	Youth	0912528522	"	"	"
Tayitu Mulegeta	Female	0927577836	"	Gera	Chira
Kedeja Abagojam	Female	-	"	"	"
Taju Kedir	Female	0928302996	"	"	"
Dejene Kebede	Youth	0917062215	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Mohammed Aba Oli	Youth	0949004275	"	"	"
Nasir Aba Lulisa	Youth	0917263752	"	"	"
Sherif Abagaro	Youth	0917263690	"	"	"
Awol Abagidi	Youth	0917258715	"	"	"
Sahili Abagidi	Youth	0917325103	"	"	"
Jafar Kemale	Youth	0927570787	"	"	"
Sultan Saman	Youth	-	"	"	"
Getu Tesfaye	Youth	0917056383	"	"	"
Faris Abafogi	Male	0917505082	"	"	"
Dega Ababugu	Male	0917905660	"	"	"
Regas Chala	Male	0917066695	"	"	"
Nurseman Shehshafi	Male	0924493840	"	"	"
Hafiz Shehe Shafi	Male	0937175067	"	"	"
Nasir Abamecha	Male	-	"	"	"
Temam Abadilbo	Male	0917259221	"	"	"
Husien Ali Mohammed	Male	0917104207	"	"	"
Bederu Abaoli	Male	0945669290	"	"	"
Abaoli Abakedir	Male	0917313921	"	"	"
Sultan Ahemed	Male	0917899403	"	"	"
Nasir Lemicha	Male	-	"	"	Genji Challa
Al Giddi Al Jobir	Male	-	"	"	"
Al Daga Al Kabe	Male	-	"	"	"
Terefe Kumsa	Male	0917202270	"	"	"
Temam A/Gero	Male	-	"	"	"
Al Biyya A Mecha	Male	-	"	"	"
Abdo Aloli	Youth	-	"	"	"
Waji Sehe Abedela	Youth	-	"	"	"
Ferdi Al Lulesa	Youth	0917751336	"	"	"
Mohammed Amin Almacha	Youth	0940567883	"	"	"
Teshome Gezahegn	Male	0917108302	"	"	Gura Afalo

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Al Nega Al Dura	Male	-	"	"	"
Abdulqadir Al Gidi	Male	0927571357	"	"	"
Birhanu Ayele	Male	-	"	"	"
Nasir Al Fogi	Male	0917616877	"	"	"
Sultan Al Fira	Male	0917913472	"	"	"
Yimam Ahimed	Male	-	"	"	"
Zinabu Katema	Male	-	"	"	"
Jihad Aldura	Male	0917244122	"	"	"
Altemam Algaro	Male	0935117901	"	"	"
Algidi Algero	Male	-	"	"	"
Ahimed Alfita	Male	0910203768	"	"	"
Abeba G/Senbet	Female	-	"	"	"
Fatuma Algaro	Female	-	"	"	"
Jimiti Almacha	Female	-	"	"	"
Aster Kefyalew	Female	-	"	"	"
Birtukan Tesma	Female	-	"	"	"
Asnaku Gebre	Female	-	"	"	"
Zeyneba Almecha	Female	-	"	"	"
Zahara Shehmohammed	Female	-	"	"	"
Hikma Yimam	Female	-	"	"	"
Fatuma Alsimal	Female	-	"	"	"
Zahara Alfosi	Female	-	"	"	"
Hawa Algero	Female	-	"	"	"
Kasahun Ketema	Youth	-	"	"	"
Kedir Altemam	Youth	-	"	"	"
Mudare Algero	Youth	-	"	"	"
Engeda Tefera	Youth	-	"	"	"
Nasir Temam	Youth	0933726418	"	"	"
Shifera Jiru	Male		Oromia	Didu	
Yesuf Mammo	Male		"	"	
Shafi Kedir	Male	0923347309	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Kebede Abdu	Male	0934256733	"	"	
Ebrahim Bazen	Male		"	"	
Asfaw Yebo	Male		"	"	
Birhanu Degafu	Male	0943211532	"	"	
Teka Zebenu	Male	0935174974	"	"	
Bayush Ashenafi	Female	0917340763	"	"	
Tsehaynesh Gelane	Female	0912754907	"	"	
Zara Zewde	Male	0919441139	"	"	
Nayime Sherif	Male	0932029353	"	"	
Ayana Guddeta	Male	0941519856	"	"	
Nezif Mohamed	Male	0934676037	"	"	
Mohamud Husen	Male	0917995703	"	"	
Buli Gudeta	Female	0919111880	"	"	
Dagitu Abera	Female	0917612978	"	"	
Rahmet Temam	Female	0917276583	"	"	
Almaz Abera	Female	0934073464	"	"	
Melkamu Kebede	Male	0961878933	"	"	
Shitaye Ayele	Female	0917995705	"	"	
Miskiya Nuru	Female	0917781957	"	"	
Birhane Tadese	Male	0917883172	"	"	
Bekelech gezahagn	Female	0935174701	"	"	
Miskiya Wedajo	Female	0917781940	"	"	
Reyima Kedir	Female	0939330146	"	"	
Kifle Merdasa	Male	0931637142	"	"	Gordomo
Kebede Wadajo	Male	0932029077	"	"	"
Beliyu Kebeda	Female		"	"	"
Bekele Gamta	Male		"	"	"
Abdisa Danu	Male	0917277626	"	"	"
Bahru Anbecha	Male		"	"	"
Biratu Hika	Male		"	"	"
Gelana Kumsa	Male		"	"	"
Teshome Gemta	Male	0934256666	"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Amare Adem	Male		"	"	"
Tesema Kuma	Male		"	"	"
Mulu Mekonnen	Female		"	"	"
Bekelu Bishura	Female	092307522	"	"	"
Chaltu Adme	Female		Oromia	Didu	Gordomo
Wuditu Birhanu	Female		"	"	"
Girma Abdisa	Male	0921213456	"	"	"
Birhanu Abdisa	Male	0913529032	"	"	"
Gezahegn Ayana	Male	0986154990	"	"	"
Gobana Tekuma	Male		"	"	"
Eshetu Dibessa	Male	0923340555	"	"	"
Abadir Kedir	Male		"	"	"
Alemayo Galana	Male		"	"	"
Abdi Hussen	Male		"	"	Kochi
Abebe Ayele	Male	0935137430	"	"	"
Taju Kedir	Male	09310698	"	"	"
Dessaegn Befkadu	Male	0917276988	"	"	"
Birhanu Befkadu	Male	0917995787	"	"	"
Badiruu Kemal	Male	0917613072	"	"	"
Temam abdu	Male		"	"	"
Tadese Gobu	Male		"	"	"
Ebrahim Sheussen	Male	0917995781	"	"	"
Haile Awajo	Male		"	"	"
Aliyi Azabi	Male		"	"	"
Awalu Kedir	Male	0943212159	"	"	"
Shafi Kalifa	Male	0917272711	"	"	"
Kemale Abdu	Male	0917218095	"	"	"
Shibiru Workineh	Male	0937176497	"	"	"
Hussen Dawud	Male	0928290099	"	"	"
Girm Tadese	Male		"	"	"
Birhanu Mekonnen	Male	0917358497	"	"	"
Hussien Jimaa	Male		"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Eshetu Tadesse	Male	0931064683	"	"	"
Yasin Warraqi	Male		"	"	"
Aberash Firisa	Male	0941192179	"	"	"
Yirga Berhe	Male	0914176566	Tigray	Wolkaite	Mugetabia
Hiwot Mahari	Femal		"	"	"
Teshome Eshetu	Male	0914363560	"	"	"
Miruts Tsehye	Male	0939233386	"	"	"
Nigusse G/her	Male	0939225336	"	"	"
Alek G/egziabeher	Male	0934202563	"	"	"
Guoush Giday	Male		"	"	"
Asmelash Behone	Male	092262081	"	"	"
Sahele Eredae	Male		"	"	"
Maesha Abay	Male	0914227976	"	"	"
Lemlem G/Silase	Femal	0964224287	"	"	"
Betre K/Mariam	Male	0933060568	"	"	"
Abreha H/Mariam	Male	0914278663	"	"	
Mebrhit G/Medhin	Female	0942666872	"	"	
Letealif G/Giorgis	Female	0914150746	"	"	
Worku Shiferaw	Male	0914222771	"	"	
Muze Hailu	Male	0914197683	"	"	
Birhan Teferi	Female	0913624150	"	"	
Birhanu Gidey	Male	0914020466	"	"	
Kidane Tadesse	Male	0914392979	"	"	
Haftu G/Wold	Male	0938136938	"	"	
Tsegaye Tsehay	Male	0914212581	"	"	
Alemu Anagaw	Male	0914391816	"	"	
T/Mariam G/Giorgis	Male	0914413644	"	"	
T/Mariam Nega	Male	0939112814	"	"	
Mekonnen Mezgebe	Male		"	"	
Ataw Sisay	Male		"	"	
Muze W/Gebreal	Male	0914476830	"	"	
Redieat Hailu	Female	09141476850	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Haftom Girmay	Male	0914228745	"	"	
G/Medhin G/Egziabher	Male	0914094435	"	"	Mugetabia
Kassahun Meresa	Male	0914167990	"	"	"
Haftu Amare	Male	0914369020	"	"	"
Dawit Fitsum	Male		"	"	"
Mulugeta Teka	Male		"	"	"
Haftu G/Hawariya	Male	0914109555	"	"	"
Alem Abreha	Female	0925057046	"	"	"
G/Silassie Kahissay	Male	0914001576	"	"	"
Hadush T/Haimanot	Male	0919009576	"	"	"
Hailay G/Here	Male		"	"	"
Hiwot Kahissay	Female	0914800820	"	"	"
W/Silassie G/Medhin	Male	0914858416	"	"	"
Abreha Areaya	Male	0914253428	"	"	"
Teklay Belay	Male	0914158172	"	"	"
Abeba Beriha	Female		"	"	"
Birhane Itey	Male	0914780962	"	"	"
Dawit Mamo	Male	0914109915	"	"	"
Kese Yadel G/Hiwot	Male	0914245573	"	"	"
Ymaneh Mahiri	Male	09387902	"	"	"
Hafity Grase	Male	0914571434	"	"	"
Kassay Gebire	Male		"	"	"
Gergis Berihe	Male		"	"	"
Atsbiha G/tkilay	Male		"	"	"
Kassya Hadus	Male		"	"	"
Giday Hailu	Male		"	"	"
Birhane Hagos	Male	0945503445	"	"	"
Giday G/Mariam	Male		"	"	"
Kahisa Hadera	Male		"	"	"
Hiodagi Birhane	Male		"	"	"
Kiros Kahissi	Male		"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Grmay Negusse	Male		"	"	"
G/Egziabher Hadera	Male	0914690585	"	"	"
H/Arayi Asefa	Male		"	"	"
H/Giday Hagos	Male		"	"	"
G/Egziabher Gaitat	Male		"	"	"
Kassyi G/ Silama	Male		"	"	"
H/Gebire Redaei	Male		"	"	"
Negusse Atsbiha	Male	0931099122	"	"	"
G/Mesikel Tsegaye	Male	0914857152	"	"	"
Tekele G/medihne	Male		"	"	"
Abirha Abadi	Male		"	"	"
Fitsum Mezgebo	Male		"	"	"
G/Hiwot G/Kiros	Male		"	"	"
Desta Berhe	Female		"	"	"
P/Desta Teferi	Male		"	"	"
A/Gebire Haile	Male	0914397516	"	"	"
Aregawi Tekilay	Male	0925329270	"	"	"
Hadgu Tewelde	Male		"	"	"
Mehari Kehasum	Male		"	"	"
Kindya p/Berihe	Male		"	"	"
Yohanse Hailu	Male		"	"	"
Zenebu Gebire	Female		"	"	"
TSiry Halefom	Female		"	"	"
Teumay negusse	Female		"	"	"
Desta G/Hiwot	Female	0914163685	"	"	"
Haftu Asbiha	Male		"	"	"
Abadi Teka	Male		"	"	"
Gatllauk Reath Thoal	Male	0943-209952	Gambella		
Thichiiot Makuach	Male	0917-779305	"		
Kang Monyjouok	Male	0932-004641	"		
Asmare Tekalegn	Male	0912-153846	"		
Fiseh Mamo	Male	0921-763879	"		

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Tewabe Mekonen	Male	0911-319910	"		
Kang Mindiko	Male	0930-004641	"		
Getachew Chaka	Male	0911-449845	"		
Yeshiwek Eba	Male	0911-375460	"		
Bayisa Aga	Male	0917-301445	"		
Birknesh Yirga	Female	0923-430245	"		
Mamaye Tsedale	Male	0912-094060	"		
Amelwork G/Egziabher	Female	0911-003287	SNNPR		
Asfaw Zewdie	Male	0911-674217	"		
Atrag G. Michael	Male	0911-772064	"		
Teshale Woldeamanuel(Dr.)	Male	0941-6822346	"		
Emebet BizuAyehu	Female	0916-027096	"		
Melesse Maada(Dr.)	Male	0941092546	"		
Siraj Dano	Male	0911-387178	"		
Solomon Mengesha	Male	0926-451650	"		
Zerihun Zena	Male	046-220-1077	"		
Mulugeta Tesfaye	Male	046-220-1316	"		
Terefe Teka	Male		"		
Mulugeta Feleke	Male	0924-742998	"		
Tesfaye Oyida	Male	0911-855775	"		
Abrrah H/Mariam	Male	0914-278663	Tigray		
Mebrhatu G/Medihn	Male	0942-666872	"		
Letalef G/Gergis	Male	0914-130746	"		
Worku Shiferaw	Male	0914-222771	"		
Muez Hailu	Male	0914-197683	"		
Berhane Tareke	Male	0913-624150	"		
Berhne Giday	Male	0914-020466	"		
Kidane Tadesse	Male	0914-392974	"	Welkait Woreda	
Hafta G/Wold	Male	0938-136938	"	"	
Tsegaye Tsehaye	Male	0914-212581	"	"	

ESMF for the implementation of REDD+ program in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
Alemu Angaw	Male	0914-393016	"	"	
T/Mariam G/Gergis	Male	0914-415615	"	"	
T/Mariam Nega	Male	0939-112850	"	"	
Mekonen Mezgebe	Male	-	"	"	
Asfaw Sisay	Male	0914-937951	"	"	
Muez H/Gebriel	Male	-	"	"	
Rediet Hailu	Female	0914-194072	"	"	
G/Hiwot Gidey	Male	0933-281980	"	"	
Hailu Girmay	Male	0914-228749	"	"	
Gashaw Kiflu	Male	0910-981809	"	"	
Abraha mezgebu	Male	0946-892104	Tigray	"	
Akilu Giday	Male	0910-661612	"	"	
Fekede mebrahtu	Male	--	"	"	
Zenebe atsebha	Male	--	"	"	
Aweke adis	Male	--	"	"	
Luley hfte	Male	--	"	"	
Wegihuley gidey	Male	--	"	"	
Kasa solew	Male	--	"	"	
Berihun wekl	Male	--	"	"	
Tikuay abohoy	Male	--	"	"	
Fantu yabgew	Female	--	"	"	
Tadla tarecke	Male	--	"	"	
Yishak girmay	Male	--	"	"	Muge Tabia
Gebeyehu Tsegaye	Male	0918301577	Amhara	Land admin. offi	
Awoke Yitay	Male	0918020079	"	"	
Endalkachew Naod	Male	0918085342	"	"	
Alemayehu Bekele	Male	0912104441	"	"	
Terefe Alemu	Male	0918769634	"	"	
Etialemahu W/kdian	Female	0918784559	"	"	
Ademe Hussien	Male	0936348822	"	Metema	Lemlem Terara
Babale Abegaz	Male	-	"	"	
Mohamed Yibedafer	Male	0934014673	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Ahmed Mustefa Said	Male	0918257887	"	"	
Yimer Ali	Male	0918184987	"	"	
Sheh hussien Adem	Male	0918174927	"	"	
Dawd Mohammed	Male	0932272914	"	"	
Mohammed Adem	Male	0934553633	"	"	
Gizachew Mohammed	Male	0939257857	"	"	
Mohammed Awel	Male	0918080121	"	"	
Getaye Hassen	Male	0918175349	"	"	
Bushra Abdela	Male	0918613046	"	"	
Addise Tegegn	Female	-	"	"	
Meryem Ibrahim	Female	-	"	"	
Zemzem Mohammed	Female	0936380620	"	"	
Merem Mohmmed	Female	-	"	"	
Zeineba Mohammed	Female	0918212274	"	"	
Fatima Ali	Female	-	"	"	
Momina Mabre	Female	-	"	"	
Dejyitnu Kase	Female	0918238755	"	"	
Mandefro Assefa	Male	0927690122	"	"	Das
Adachew Abegaz	Male	0927606941	"	"	
Ibrahim Mekonen	Male	0918175125	"	"	
Letaw Mellese	Male	0933465913	"	"	
Siras Amagnu	Male	-	"	"	
Mohammed Nur	Male	0918554820	"	"	
Yegnanesh Adis	Male	0918272809	"	"	
Tesfaye Mekuriaw	Male	0927628283	"	"	
Tekle Bayu	Male	0929999981	"	"	
Sefaw Assefa	Male	-	"	"	
Tekem Getahum	Male	-	"	"	
Abera Admasie	Male	0931499422	"	"	
Yosef Gubra	Male	-	"	"	
Abdu Ageze	Male	-	"	"	
Eyob Fentaw	Male	-	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Mohammed Kase	Male	-	"	"	
Mamo Assefa	Male	-	"	"	
Wereseaw Baye	Male	-	"	"	
Ahmed Mekonnen	Male	0918594902	"	"	
Mohammed Ahmed	Male	0918227484	"	"	
Hussien Kassaw	Male	0918476375	"	"	
Seid Abi	Male	0918045579	"	"	
Akale Melese	Male	0928490586	"	"	
Libase Sitotaw	Male	0918175354	"	"	
Mohammed Asege	Male	-	"	"	
Hassen Tegegn	Male	-	"	"	
Eshete Birke	Male	0936761540	"	Tarma Ber	Debre Maaza
Debaba Worku	Male	0932581494	"	"	
Habtu Kefelegn	Male	0915557590	"	"	
Nigussie Dessalegn	Male	-	"	"	
Sebesh Tademe	Male	-	"	"	
Belayneh Zerga	Male	0922101265	"	"	
Melake Kifle	Male	-	"	"	
Bizuneh Zewdie	Male	0926831169	"	"	
Bekele Moges	Male	0920747753	"	"	
Demeke Ayele	Male	-	"	"	
Mekete Worku	Male	-	"	"	
Asmaru Asegu	Female	0945568006	"	"	WofWasha
Sinkinesh Afework	Female	0921136289	"	"	
Ayelech Kebede	Female	-	"	"	
Emuye Gebre	Female	-	"	"	
Zenebech Bekele	Female	-	"	"	
Zenebu Mulu	Female	-	"	"	
Sasahu Tilahun	Female	-	"	"	
Lakech Betru	Female	-	"	"	
Abebu Gedlu	Female	-	"	"	
Fanaye Ayele	Female	-	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Yalemsew Eniyew	Female	-	"	Banaja Shikudad/Kosos Ber	Woreda Office
Anteneh Asfaw	Male	0918537028	"	"	
Birhanu Bezabih	Male	0918742160	"	"	
Nigatu Bitew	Male	-	"	"	
Asires Mitiku	Male	-	"	"	
Anteneh Taye	Male	-	"	"	
Muluken Alamirew	Male	-	"	"	
Ajebush Ferede	Male	-	"	"	
Molla Yeneneh	Male	0937645513	"	"	
Yeshaneh Amsalu	Male	0920175497	"	"	
Gashaw Gessa	Male	0921580822	"	"	
Emebet Ayalew	Female	-	"	"	Senkela
Zertihun Moges	Female	-	"	"	
Asresah Melaku	Female	-	"	"	
Ayalenesh Getahun	Female	-	"	"	
Hizbadosh Nigussie	Female	-	"	"	
Ayalnesh Mekonnen	Female	-	"	"	
Alemtshehay Tilahun	Female	-	"	"	
Tadife Tamir	Female	-	"	"	
Mulunesh Yismaw	Female	-	"	"	
Yiftusira Yeshiwas		-	"	"	
Emiye Asmare		-	"	"	
Bitewush Admas		-	"	"	
Adanech Arega		-	"	"	Askuna
Farnus Bogale		-	"	"	
Tej Zegeye		-	"	"	
Bitewush Hailu		-	"	"	
Alayush Tsetargew		-	"	"	
Alemnesh Abaye		-	"	"	
Bitewush Eshetu		-	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Asayech Nigat		-	"	"	
Workneh Abegaz		-	"	"	
Tefera Abaye		-	"	"	
Tilahun Kasahun		0923232514	"	"	
Alganeh Asfaw		-	"	"	
Minayehu Kasahun		0927636429	"	"	

Geplano MEMIs plc



Attendance Sheet at Woreda level

Form I.2: ~~Men~~ Attendance sheet for SESA-ESMF

Date 11/06/2015

Name of Woreda Tarmaber Kebele _____

Agenda: _____

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Yashidanga Fek	0919254032		ግጠና ላይ
2	Negash Demekru	0913509927		አይደለም
3	Adhiso Semene	0923652396		ግጠና ላይ
4	Rabia Hussien	0911737626		አይደለም
5	Asnebir Amesse	0913064525		ግጠና ላይ
6	Messim Girma	0913079280		አይደለም
7	Kebera Ayele	0921135333		አይደለም
8	AKALE WODNEH	0920925569		አይደለም
9	Yizhibe G. G. G. G.	09109002434		አይደለም
10	Yizhibe G. G. G. G.	0904160009		አይደለም
11	Solido neta	554		አይደለም
12	Terefe Aqa	0911830388		አይደለም



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Form I.2: Men Attendance sheet for SESA-ESMF

Date 23/06/15

Name of Woreda Banja Kebele Sankala

Agenda: Discussion on points (issues)
related to REDD+ project at
kebele level.

Lists of Participants

No	Name	Mobile	Signature	Remark
1	<u>ገዢ ተገባሪ</u>		<u>[Signature]</u>	<u>ሚስት</u>
2	<u>ገዢ ገዢ</u>		<u>[Signature]</u>	<u>አገልግሎት</u>
3	<u>ገዢ ገዢ</u>		<u>[Signature]</u>	<u>አገልግሎት</u>
4	<u>ገዢ ገዢ</u>	<u>0928513249</u>	<u>[Signature]</u>	<u>አገልግሎት</u>
5	<u>ገዢ ገዢ</u>	<u>0934613983</u>	<u>[Signature]</u>	<u>አገልግሎት</u>
6	<u>ገዢ ገዢ</u>		<u>[Signature]</u>	<u>አገልግሎት</u>
7	<u>ገዢ ገዢ</u>	<u>0913961020</u>	<u>[Signature]</u>	<u>አገልግሎት</u>
8	<u>ገዢ ገዢ</u>	<u>0913869879</u>	<u>[Signature]</u>	<u>አገልግሎት</u>
9	<u>ገዢ ገዢ</u>	<u>0925182694</u>	<u>[Signature]</u>	<u>አገልግሎት</u>
10	<u>ገዢ ገዢ</u>	-	<u>[Signature]</u>	<u>አገልግሎት</u>
11	<u>ገዢ ገዢ</u>	-	<u>[Signature]</u>	<u>አገልግሎት</u>
12				



ESMF for the implementation of REDD+ program in Ethiopia

Organization MEMTO plc



Woreda Koreda
Form I.4: Youth Attendance Sheet for SESA-ESMF

Date 16/06/2015

Name of Woreda Metema Kebele Amuduru

Agenda: _____

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Amness Abebe	0918060733		Environment
2	Tigist Yirga	0925300617		Environment protection environmental
3	Getachew Tilahun	09-18-30-61-00		Environment
4	Getnet Kassa	0918175417		Agriculture
5	Yeziou Mengistu G.	0910088206		Women, children Youth Affairs
6	Sisemaw Tsega	0912222227		Co-operative Production
7	Habtemu Adisu	0918 0435047		Environment
8	Kibre Kidusan Banti	0918210293		Water resource
9	Deju Zeyene	0918059966		Natural resource
10	Gebr Eamesh Gesta	0918333481		Women, children Youth Affairs
11	Yirga Ferede	0918200111		W/ Affairs
12	Tilahun Awoke	0918532661		Women, children Youth Affairs



to
to



Form I.2: Women Attendance sheet for SESA-ESMF

Date 13/10/2007

Name of Woreda Decha Kebele Gedam

Agenda: Focus group discussion at kebele level

Lists of Participants

No	Name	Mobile	Signature	Remark
1	W/ro Aregoch Apo			PFG member
2	" Aregoch G/michael			
3	" Aregoch Asafa			
4	" Wudito Wudero			
5	" Abebech Kada			
6	" Eggaicho Bekete			
7	" Alemitu Ado			
8	" Azalech Abebe			
9	" Wudito Tafesse			
10	" Aselefech Asafa			
11	" Tariku Haile			
12	" Azalech Tadese			
13	" Beketech Blete			
14	" Felekech Mekonen			





Form I.2: Men Attendance sheet for SESA-ESMF

Date 3/10/07

Name of Woreda Dodola Kebele Deneba

Agenda: Kebele Level Focus Group Discussion

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Anshaa Almkail	0920068272	<i>[Signature]</i>	
2	Garibua Herbboo	0912975318	<i>[Signature]</i>	
3	Barsoo dubee	0928039272	<i>[Signature]</i>	
4	Gamaad weene	0926473066	<i>[Signature]</i>	
5	Ibixalim Gariso	0910254082	<i>[Signature]</i>	
6	Phubaa Gerow	0929324938	<i>[Signature]</i>	
7	Garbaya simeu	0916018251	<i>[Signature]</i>	
8	Shibiruu Barsoo	0910440527	<i>[Signature]</i>	
9	Irabbo Guyyee	0920358779	<i>[Signature]</i>	
10	Kubuxi Fintoo	0912757193	<i>[Signature]</i>	
11	Umar Hucsi	0922701912	<i>[Signature]</i>	
12				



ESMF for the implementation of REDD+ program in Ethiopia



Form I.4: Youth Attendance Sheet for SESA-ESMF

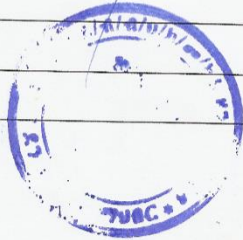
Date 13/10/2007

Name of Woreda Decha Kebele Anrada

Agenda: Focus group discussion at kebele level

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Ato Rife G/Mon's	0917254666	<i>[Signature]</i>	D.A
2	" Alemayhu Haile	-	<i>[Signature]</i>	PFA member
3	" Ashetiv G/mariam	0945024548	<i>[Signature]</i>	PFA member
4	" Gebyhu Gebre	0935398523	<i>[Signature]</i>	PFA member
5	" Admasu Haile	-	<i>[Signature]</i>	PFA member
6	" Mido Zeleke	-	<i>[Signature]</i>	PFA member
7				
8				
9				
10				
11				
12				



ESMF for the implementation of REDD+ program in Ethiopia

GreenMEMI plc



Form I.4: Attendance Sheet for SESA-ESMF

Date 10-06-2015

Name of Woreda Amuru Zurfa Woreda

Agenda: Consultation on REDD+ Program with Woreda stakeholders

Lists of Participants

No	Name	Sex	Institute	Mobile	Signature
1	Assefa Adeto	M	FIELD	0960878887	
2	Kassahun Degefa	M	Education	0923859857	
3	Tamiru Tesdane	M	Trade Industry	0916277771	
4	Aisine Adamu	M	Administration	0913589721	
5	Tobe yemo	M	Administration	0990977998	
6	Dawit hencho	M	A/Z Youth	0913601992	
7	Sisay Wolde	M	A/Z W/ S/C/Off	0910653060	
8	Addisu Getu	M	Women Office	0910413322	
9	Abei Bariza	M	Amiz/W/ Administration	0910726909	
10	Harekulwa Tesfaye	F	"	0961781561	
11	Muluken Gebena	M	Amiz/W/ Tourism	0910094177	
12	Deqide Demisse	M	Administration	0913066725	
13	Daniel Ketema	M	" "	0926386616	
14	Solomon Wankie	M	A/Z/W/ Admin	0934238843	
15	Bekete Ameha	M	A/Z/W/ C/S/Off	0939808286	
16	Maredurkw Tunato	F	A/Z/W/ C/S	0913785359	
17	Tesfu Abire	M	Amiz/W/ Police	0916301023	
18	Debalke Bocho	M	A/Z/W/ W/C/Off	0923482552	
19	Moges Mervon	M	Amiz/W/ A/C/Off	0936488041	
20	Engida Gigege	M	"	0910451910	



Annex 4: Photos Captured During the Field Work (Partial)



Discussion with Gambella region Key informant



Consultation with Decha Woreda



Consultation & focus group discussion conducted in Wondo-Genet Woreda

Anne 5: Eligibility Screening Checklist for Subproject at Kebele Level

Eligibility Screening Checklist for Subproject at Kebele Level			
Subproject Name			
Region			
Zone			
Woreda			
Kebele			
Answer the following questions to determine if the sub-project is eligible or not	Yes	No	
Will the project have significant risk on vulnerable group / forest dependent people			
Will the project create unsustainable harvesting of natural resources (animals, plants, timber and/or NTFPs) or the establishment of forest plantations in natural critical habitats			
Will the project have adverse impact on cultural heritage sites in project area			
Will the project have significant adverse impact on nearby important natural habitat			
Will the project include the construction and/or operation of dams of more than 15 meters in height			
Will the project activities contravene major international and regional conventions on environmental issues			
PROJECT ELGIBILITY RECOMMENDATION:			
<ul style="list-style-type: none"> ▪ If you answer YES to any of the questions above, your project is not eligible for funding ▪ If you answer No to all of the questions above, please proceed to the next step 			
NAME AND SIGNITURE OF ASSESSING BODIES			
NAME:	SIGNITURE		
NAME:	SIGNITURE		
NAME:	SIGNITURE		

Annex 6: Checklist for Environmental and Social Impact of REDD+ Investment Interventions⁷

REDD+ Investment Interventions	Site Sensitivity			
	High	Medium	low	Unknown
Ensuring Sustainable Forest Management (in highforest and/or woodlands) throughPFM/Restoration.				
Economically driven forest mismanagement that may lead to forest degradation				
Instigate deforestation from marginalized local communities and/or little benefiting PFM members				
Creation of dependency syndrome on local communities				
Creation of Conflict over benefit sharing and marginalization of certain segments of local community				
Creation of conflict over skewed power relationship				
Conflict over skewed power relationship				
Reducing Demand for fuel wood and charcoal through increased efficiency and providing alternatives (Efficient cook stove)				
Increased use of energy efficient stove may indirectly lead to high biomass energy demand and consumption high in turn cause deforestation				
Incur cost to poor local communities				
Difficult to adopt the technology due to cultural barriers				
Difficulty to supply energy efficient cooking stoves, biogas and electricity over short period of time				
Exploitation by middlemen in the market chain				
Long awareness creation and technology adoption process				
Increase wood and charcoal				
Exotic species may dominate as these are fast growing than the indigenous				
Environmental degradation during harvesting and transporting				

⁷While considering the location of investment intervention area, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. It shows a real risk of causing adverse environmental and social impacts, and that more important environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

REDD+ Investment Interventions	Site Sensitivity			
	High	Medium	low	Unknown
time				
Adverse micro-climate modification after harvesting				
Market problem for sealing of product				
Pollution of particulate matters				
May brings food insecurity as farm lands devoted to plantation				
Agricultural Intensification				
Fertilizer runoff and leaching, eutrophication and effect on human health				
Runoff of pesticides and similar agricultural chemicals				
Increased pesticides harms animal and human health by accumulating in soils and leaching into water bodies				
Stalinization and regimes of underground water				
Inadequate drainage and over-irrigation causes water logging				
Create farmers dependency on agricultural inputs				
Reduces farmers' ability to use natural pest cycles				
Affect human health due to agricultural chemicals				
Prevalence of water borne diseases				
Improving Livestock Management				
Solid and liquid wastes expected from poultry farm				
Nuisance odor expected from poultry frame				
Mechanization leads to intensive use of agricultural inputs that results in pollution				
Market problem of the products of livestock may be a challenge				
Enhancement of Forest Carbon Stock (Afforestation/reforestation)				
Introduction of exotic tree species which result loss of biodiversity and damage the natural environment				
Competition created between tree, crop or livestock components due to overlap				
presence of frequent forest fire				
Increased illegal cuttings and destruction				

REDD+ Investment Interventions	Site Sensitivity			
	High	Medium	low	Unknown
Increased conflict between wildlife & humans & increased crop pest				
Physical & economic relocation of local communities				
Restriction over livestock pasture				
Restriction of expansion of household farmland				
Create access restriction for resource utilizations				
Create land computation with local community				
Can prevent human and livestock mobility				
Promote supplementary income generation from the forest				
frequent entry into the forest for NTFP collection affects regeneration				
Frequent Collection of Leave, twigs and fallen branches result in reduction of carbon stock				
Conflict arise due to unfair access or use right on NTFP				
Increase price of NTFP led to create over utilization				
Demand driven Research and extension linkage				
Community need may not be addressed				
Research results may not lead to action on the ground				

Issues	Site Sensitivity		
	High	Medium	Low
Natural habitat	Presence of hot spot biodiversity area, fragile ecosystem with in declared protected area	No critical natural habitats; other natural habitats occur	No critical hot spot biodiversity area, fragile ecosystem
Water quality and water resource availability and use	Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important	Medium intensity of water use; multiple water users; water quality issues are important	Water flows exceed any existing demand; low intensity of water use; potential water use conflicts expected to be low; no potential water quality issues

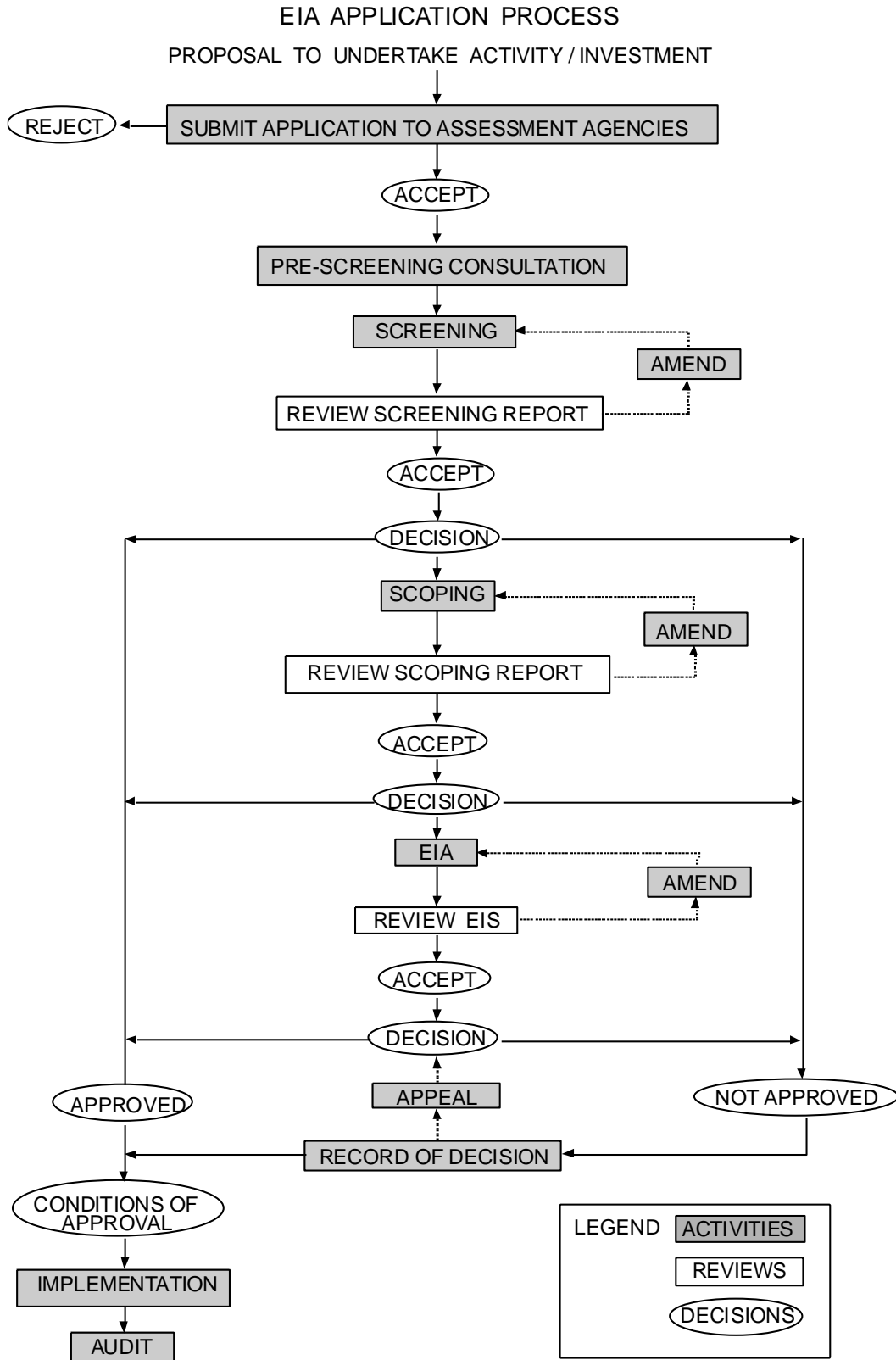
Land and Tenure	Land conflicts historically unresolved, admitted farmers being evicted, tenant farmers losing rights and no transparency or grievance redress available	Process of land regularization and rights to natural resources being worked out with clear communication and grievance process in place	No conflicts, disagreements around use of land, users rights
-----------------	---	---	--

Determination of environmental category (B or C) based on findings of the screening:

- Requires an ESIA.....
- Requires preparation of additional E&S information.....
- Does not require further environmental or social due diligence.....

Summary of E & S assessment comments based on field visit:

Annex 7: ESIA Application Process for Competent Institute in Ethiopia



Annex 8: ESIA Application form for Federal or Regional Competent Institutes

APPLICATION FOR ENVIRONMENTAL AUTHORISATION				Page: 1
For official use only	Federal		Application No:	
	Regional		Date received:	
	Responsible official:			
PARTICULARS OF APPLICANT				
Name of applicant:				
Contact Person:				
Postal Address:				
			Postal Code:	
Telephone No:		Facsimile No:		
Cellular No:		E-mail address		
TITLE OF PROPOSED ACTIVITY				
DESCRIPTION OF PROPOSED ACTIVITY				
(please append if insufficient space provided)				
LOCATION OF PROPOSED ACTIVITY				
Region:				
Nearest town:				
Name of property(s):				
Extent of property(s):				

APPLICATION FOR ENVIRONMENTAL AUTHORISATION				Page: 2	
PROBLEMATIC ISSUES IDENTIFIED					
(please append if insufficient space provided)					
CONSULTANT					
I propose to make use of the following consultant:					
Name of consultant:					
Contact Person:					
Postal Address:					
				Postal Code:	
Telephone No:				Facsimile No:	
Cellular No:				E-mail address	
SIGNATURES					
Applicant:				Date:	
Witness:				Date:	
Witness:				Date:	
				Place:	
				Place:	
				Place:	

Annex 9: Terms of Reference for Sub-Project Requiring an ESIA

Terms of Reference for Sub-Project Requiring an ESIA

Based on the screening and scoping results. ESIA terms of reference will be prepared. The terms of reference will have the following content:

I. Objective of the TOR

This section should state the scope of the ESIA in relation to the screening category, identify the REDD+ REDD+ program investment activities the ESIA will apply to. It needs to stipulate the process and its timing of project preparation, design, and implementation stages in order to adequately address national and Bank safeguards issues.

II. Introduction and Context

The ToR needs to provide information on project objective, project proponent, need to conduct the ESIA, specific project component, project area with location map, short briefing of social and environment of settings and applicable national and international safeguard policies.

III. Location of the study Area and Likely Major Impacts

State the area involved and the boundaries of the study area for the assessment.

Identify adjacent or remote areas which should be considered with respect to impacts of particular aspects of the project.

IV. Mission/Tasks

The Consultant should clearly execute the following tasks:

Task A: Description of the proposed project

present description of the relevant parts of the project, using maps (at appropriate scale), pre-construction activities; construction activities; schedule; and also provide particular types of information appropriate in the description of the project category you are concerned with.

Task B: Biophysical environment description

Describe the biophysical and socio-economic characteristics of the environment where the project activities will be realized; and area of influence. Include information on any changes anticipated before the project commences.

Task C: Legal Policy framework

This part need to identify pertinent regulations and guidelines pertinent to the study that include:

- National laws and/or regulations on environmental assessments;
- Regional environmental assessment regulations;
- Environmental assessment regulations of any other financing organizations involved in the project.
- Relevant international environmental agreements/conventions to which the country is party
- World Bank Operational Policies 4.01 "Environmental Assessment," 4.04 "Natural Habitats", 4.11 "Cultural Property", 4.12 "Involuntary Resettlement", 4.10 "underserved People" and other

Terms of Reference for Sub-Project Requiring an ESIA

pertinent operational policies and Guidelines.

Task D: Identification of potential impacts of the project

Identify all potential significant impacts that the project is likely to generate. Assess the impacts from changes brought about by the project on baseline environmental conditions as described under Task 2.

In this analysis, decide between significant positive and negative impacts, direct, indirect, and cumulative impacts, and immediate and long-term impacts. Wherever possible, describe impacts quantitatively, in terms of environmental costs and benefits. Impact analyses for sub projects should be divided between construction impacts and operational impacts.

Task E: Propose Project alternatives

Alternatives extends to site, design, technology selection, construction techniques and phasing, and operating and maintenance procedures. Compare alternatives in terms of potential environmental impacts; capital and operating costs; suitability under local conditions; and institutional, training, and monitoring requirements.

Task F: Development of an Environmental and Social Management Plan (ESMP):

This suggest feasible mitigation measures. Estimate the impacts and costs of those measures, and of the institutional and training requirements to implement them. Prepare a management plan including proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures. Provide environmental protection clauses for application by contractors and consultants.

The ToR should state that the concerned and affected parties should agree mitigating measures before they are submitted as recommendations in the ESMP.

Task G: Monitoring Plan

This organizes a comprehensive plan to monitor the implementation of mitigating measures and the impacts of the project during construction and operation. Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to implement the plan.

Annex 10: Contents of ESIA Report

Content of ESIA Report

- Cover page
- Table of Contents
- List of Acronyms
- Executive Summary: It concisely discusses significant findings and recommended actions
- Introduction: This section will have importance in providing background information about the proposal and indicating how the report is structured.
- Approach to the study: The methodologies to be used for identifying, predicting and evaluating of the impacts (both positive and negative), alternatives, mitigating measures and public participation are required to be described.
- Assumptions and/or Gap in knowledge: Reliability and quality of data to be collected with regard to the proposed project from different sources may involve some degrees of uncertainties due to absence of sufficient information. Thus, address such kinds of issues clearly in this section.
- Administrative, Legal and Policy requirements: Discusses the policy, legal, and administrative framework within which the ESIA is carried out. Explains the environmental requirements of any cofinanciers. Identifies relevant international environmental agreements to which the country is a party
- *Project description*: Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required. Normally includes a map showing the project site and the project's area of influence.
- Assessment
 - *Baseline data/information* (biophysical Environment and socio-economic environment): Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigatory measures. The section indicates the accuracy, reliability, and sources of the data
 - *Analysis of alternatives*. Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the "without project" situation—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement

Content of ESIA Report

- *Synthesis and analysis of environmental and social impacts.* Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention
- Process and record of public consultations: Public consultations are mandatory requirements throughout the REDD+ project cycle and an inherent component of the ESIA process, especially during scoping and reviewing. The overall goal is the involvement of the public in decision-making.
- Environmental and social management plan: It covers mitigation measures monitoring and institutional strengthening, as well as estimates of costs and responsibility for implementation of surveillance and monitoring
- Conclusions and Recommendations: This section is important to highlight key issues, which are relevant to decision making, especially the main reasons for selecting the recommended alternatives.
- need to be clearly stipulated.
- References
- Appendices
 - Terms of reference
 - List of persons/institutions met
 - List of the ESIA study team members, including qualifications and work experience
 - List of associated reports, if any (e.g. Resettlement Action Plan)
 - Endorsement letter from the concerned relevant environmental agency/ local administration;
 - Flow charts and site maps

Annex 11: Contents for Consultation Reports

1. Introduction

1.1 Project Description

1.2 Applicable Laws, Regulations, and Policies to Public Engagement

1.3 Project Lenders

2. Stakeholder Analysis

2.1 Areas of Influence/Stakeholders

2.2 Description of Stakeholder

3. Stakeholder Engagement

3.1 Previous Consultation Activities

3.2 Implemented Community Engagement Activities

3.3 Local Community Comments

3.4 Summary of Community Discussions

4. Summary of Key Issues and Responses

5. Future Consultation Events

6. Disclosure Plan

Annex 12: ESMP format for a Project

The ESMF emphasizes that an environmental and social management plan (ESMP) should fit the needs of a project and be easy to use. The basic elements of an ESMP are:

- A description of the project activity;
- A description of potential environmental and social impacts;
- A description of planned mitigation measures;
- An indication of institutional/individual responsibility for implementing mitigation measures;
- A program for monitoring the environmental and social effects of the project both positive and negative;
- A time frame or schedule; and
- A cost estimate and source of funds.

Description of the project activity	Anticipated impact	Proposed Mitigation measure	Responsible body for implementing mitigation measures	Monitoring indicator	Time Frame or Schedule	Cost for implementing mitigation action

Annex 13: Sample Monitoring and Verification Indicators of Social and Environmental Risks

Risks		Mitigation Measures		Monitoring indicators		Verification		Responsibility
Social	Environmental	Social	Environmental	Social	Environmental	Social	Environmental	

Annex 14: Suggested Template for Environmental & Social Management Plan Compliance Monitoring

- **Subproject Information**
 - Name of subproject proponent:
 - Subproject Title:
 - Subproject category:
 - Subproject location:
 - Reporting period:
- **Main findings of the monitoring, including feedback/grievance received from stakeholders:**
- **Impacts/issues as per the ESMP of the subproject:**

ISSUES (POTENTIAL IMPACT)	MITIGATING MEASURES	SCHEDULE / DURATION OF MITIGATING MEASURES	Compliance Progress Indicator	Status of Compliance				MEANS OF VERIFICATIONS/REMARKS	Factors Affecting Safeguards Compliance	Actions Needed
				Overall Target	Target as of the Reporting Period	Actual as of the Reporting Period	Variance			

- **Conclusions and recommendations:**
- **Experts / team leader who prepared/approved the report**

	Name	Sign.	Date
Prepared by:	1-----	-----	-----
	2-----	-----	-----
	3-----	-----	-----
Approved by:	1-----	-----	-----

Annex 15: Guiding Principles for the Consultation and Participation Process

The implementation of this ESMF will be guided by the following core principles:

- **Transparency:** all aspects of the ESMF from design, implementation and monitoring should be discussed and communicated transparently to all stakeholders at all levels, and any decision needed should be taken collectively. All stakeholders should have full and equal access to all information about the project;
- **Inclusiveness:** the program should identify and involve all ranges of stakeholders. It should include various social groups such as disadvantaged groups, women and youth, and be gender sensitive (see Annex 18). All stakeholders at various levels in towns and inside and around forests should be involved and have equal voices and decision making power on issues concerning the project;
- **Participatory:** the project's decision making should avoid informing and dictating, rather must involve stakeholders in a truly participatory style. It should incorporate voices and concerns of all into planning and implementation of the program;
- **Open and two way dialogues:** information obtained and views of community level stakeholders should be respected equally as that of professionals at federal and regional level. Therefore, two way exchanges of information and consensus building approach should be pursued;
- **Flexibility:** the program implementation should learn by doing, and be flexible enough to incorporate new ideas, approaches and stakeholders as they emerge and found necessary to include, and
- **Put in place mechanism for grievance redressing:** stakeholders should have a system where they can reflect their concerns and grievances at any time and be heard. Any conflict arising in the process of implementing the project should also be resolved and redressed immediately using an established and transparent system.

Annex 16: Sample Grievance Receipt and root causes analysis format

A. Sample Grievance Receipt format

No	Description of grievance	Date of receipt	Particulars of grievant		Particulars of grievance		Action taken
			Name	Address	Subject of grievance	Brief description of grievance	
1							
2							

B. Sample Grievance root causes analysis format

No	Description of grievance	Root causes of grievance	Required actions to improve grievance	Authority responsible to take action	Planned date for Taking Action	Action taken date
1						
2						

Annex 17: Sample Grievance and Resolution Form

Sample grievance and resolution form		
Name of Complaint: _____		
Contact Address: Woreda _____, Kebele _____, Village _____; mobile phone _____)		
Nature of Grievance or Complaint: _____ _____		
Summary of Discussion with Complaint _____ _____		
Signature _____ Date: _____		
Review/Resolution		
Date of Conciliation Session: _____		
Was complaint Present?:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Was field verification of complaint conducted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Findings of field investigation: _____ _____		
Was agreement reached on the issues?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If agreement was reached, detail the agreement below: _____ _____		
If agreement was not reached, specify the points of disagreement below: _____ _____		
Name and Signature of GRC Members		
Name _____	Signature _____	Date: _____
Name _____	Signature _____	Date: _____

ESMF for the implementation of REDD+ program in Ethiopia

Name _____	Signature _____	Date: _____
Name _____	Signature _____	Date: _____
Name _____	Signature _____	Date: _____
Name and Signature of Independent Observer		
Name _____	Signature _____	Date: _____
Name and Signature Complaint		
Name _____	Signature _____	Date: _____

Annex 18: Gender Mainstreaming

Gender Mainstreaming	
<p>Gender can be defined as a socially and culturally constructed set of characteristics, roles, responsibilities, and behaviors that distinguish between men and women. Gender is not the same as sex. Sex is biologically determined and it is just one aspect of a person's gender. Gender behaviors and attitudes are learned or acquired; they are neither fixed nor universal.</p> <p>"Mainstreaming" means bringing what or who can be seen as marginalized or excluded into the core decision-making process. In this context, gender mainstreaming can be defined as a process to integrate perspectives and roles of both men and women, as an integral part in designing, implementing, monitoring and evaluating plans, policies and programs, so that both men and women can engage equally and benefit equitably.</p> <p>Women may not benefit under REDD+ because they lack or have restricted land tenure rights, do not participate fully and effectively in consultations or decision-making process; have limited access and/or control of information, technology and tools; lack access/or control of income-generating forest activities, and receive unequal benefits due to gender blind benefit sharing schemes. Due to these governance issues, it becomes urgent to bring on board local women, empower them and build their capacities; to ensure that women are involved in all REDD+ related activities; and to contribute to proper implementation of REDD+ safeguard instruments.</p> <p>Thus, the following comprehensive gender mainstreaming monitoring indicators is suggested in order to follow mainstreaming of gender in the REDD+ program.</p>	
Issue	Indicators
Assessing equal opportunities	Number of men and women participating in activity and percentage of total of their population
	Percent of project inputs contributed to project activities (labor, tools, money, time, in-kind contributions, etc.) (male: female)
	gender expert, women's group, or gender-focused CSO consulted in the project development phase
	access to resources through the project (land, technical assistance, etc.) equal between men and women
Assessing participation	Number of men and women participating in activity and percentage of total of their population
	Percent of project inputs contributed to project activities (labor, tools, money, time, in-kind contributions, etc.) (male: female);
	gender expert, women's group, or gender-focused CSO consulted in different phase of REDD+ program
	Number/percentage of women/men <i>attending</i> activities & trainings & meetings in REDD+
	Number of men/women benefitting from the different REDD+ program
	Number of men/women demonstrating leadership in REDD+ program

Annex 19. Guideline for Integrated Pest Management Plan: Elements of an Integrated Pest Management (IPM) Plan

Government policy encourages use of biological or environmental controls and other measures to reduce reliance on agricultural chemicals, including pesticides. Integrated pest management (IPM) refers to a mix of farmer-driven, ecologically based pest control practices that seek to reduce reliance on synthetic chemical pesticides. It involves (a) managing pests (keeping them below economically damaging levels) rather than seeking to eradicate them, (b) relying, to the extent possible, on nonchemical measures to keep pest populations low; and (c) selecting and applying pesticides, when they have to be used, in a way that minimizes adverse effects on beneficial organisms, humans, and the environment. (It should be noted that Program funds will not be used for the purchase of pesticides or fertilizers.) The following elements should be considered and given due attention when preparing an integrated pest management plan for program activities (e.g. agricultural intensification) to be funded by the National REDD+ Program so as to avoid, minimize and mitigate any potential negative environmental and social impacts. The IPM plan (after getting a clearance for it by the respective regional Bureau of Agriculture(BoA)) should be included and presented as part of the ESMP/ESIA for environmental clearance. For detail information and use, refer to Environmental Impact Assessment Guideline on Pesticides and also contact the Ministry of Agriculture and Natural Resources (MoANR), the regional BoEF and its respective zonal/woreda offices, and the Ministry of Environment, Forest and Climate Change.

1. Pest Management Approach

i. Current and anticipated pest problems relevant to the project

Describe common pest problems and estimated economic impact

ii. Current and proposed pest management practices

Describe current and proposed practices, including non-chemical preventative techniques, biological and chemical control. Is optimum use being made of agro-ecosystem management techniques to reduce pest pressure and of available non-chemical methods to control pests? Do farmers and extension staffs get sufficient information about IPM approaches that reduce reliance on chemical control?

iii. Relevant IPM experience within the project area, Woreda, region or country

Describe existing IPM practices, projects/programs, research

iv. Assessment of proposed or current pest management approach and recommendations for adjustment where necessary

Where the current or proposed practices are not consistent with the principles of an IPM approach, the discrepancies should be discussed and a strategy should be proposed to bring pest management activities into line with IPM.

2. Pesticide Management

i. Describe present, proposed and/or envisaged pesticide use and assess whether such use is in line with IPM principles.

Provide purpose of pesticide use, type of products used, frequency of applications, and application methods. Is pesticide use part of an IPM approach and is it justified? Justification ESMF for the Oromia Forested Landscape Program (Revised final draft) of pesticide use under the project should (a) explain the IPM approach and the reason why pesticide use is considered, (b) provide an economic assessment demonstrating that the proposed pesticide use would increase farmers' net profits, or for public health projects, provide evidence that the proposed pesticide use is justified from the best available (probably WHO supported evidence) public health evidence.

ii. Indication of type and quantity of pesticides envisaged to be financed by the project (in volume and ETB value) and/or assessment of increase in pesticide use resulting from the project.

iii. Circumstances of pesticide use and the capability and competence of end-users to handle products within acceptable risk margins (e.g. user access to, and use of, protective gears and appropriate application equipment; users' product knowledge and understanding of hazards and risks; appropriateness of on-farm storage facilities for pesticide).

iv. Assessment of environmental, occupational and public health risks associated with the transport, storage, handling and use of the proposed products under local circumstances, and the disposal of empty containers.

v. Pre-requisites and/or measures required to reduce specific risks associated with envisaged pesticide use under the project (e.g.: protective gear, training, upgrading of storage facilities, etc.).

vi. Selection of pesticides authorized for use, taking into consideration: (a) criteria set at national (if there is any) or international, (b) the hazards and risks and; (c) the availability of newer or less hazardous products and techniques (e.g. bio-pesticides, traps).

3. Monitoring and Supervision

i. Description of activities that require local monitoring during implementation,

ii. Description of activities that require monitoring during supervision visits (e.g. regarding effectiveness of measures to mitigate risks; progress in strengthening regulatory framework and institutional capacity; identification of new issues or risks arising during implementation)

iii. Monitoring and supervision plan, implementation responsibilities, required expertise and budget

Annex 20. Summary of Small Dam Safety Guideline (MoA)

1. Introduction

The overarching dam safety objective is to protect people, property and the environment from the harmful effects of disoperation or failure of dams and reservoirs. To ensure that dams and reservoirs are operated and that activities are conducted so as to achieve the highest standards of safety that can reasonably be achieved, measures have to be taken to achieve the following three fundamental safety objectives:

- To control the release of damaging discharges downstream of the dam;
- To restrict the likelihood of events that might lead to a loss of control over the stored volume and the spillway and other discharges; and
- To mitigate through onsite accident management and/or emergency planning the consequences of such events if they were to occur.

These fundamental safety objectives apply to dam and activities in all stages over the lifetime of a dam, including planning, design, manufacturing, construction, commissioning and operation, as well as decommissioning and closure.

2. Planning of small Dams

There are some fundamental principles which should be applied through the investigation, design, construction and commissioning stages to achieve an adequate level of safety. The principles are:

- i. the competence and experience of the owner's agents relative to the nature and dam hazard category of the dam, must be appropriate in all areas;
- ii. there must be a cooperative and trusting relationship between the owner and technical advisers, and the designers must be given full control over decision making in critical areas;
- iii. the owner must agree to apply the appropriate level of funding for investigations, design and construction to reduce the chances of critically important issues (particularly related to foundations) being not sufficiently well assessed or under protected;
- iv. the designer/technical adviser has a duty not to compromise unduly due to financial pressures from the owner, developer or contractor;
- v. continuity of key technical advice should be maintained throughout all stages of the dam from development, through design, construction and commissioning, to reduce chances of critical points of design philosophy and intent being misinterpreted during construction or commissioning.

Dam site investigation

Selecting the Dam Site

When choosing the location and size, the dam owner should also take into account what would happen if the dam failed suddenly and whether it would result in loss of life, injury to persons or livestock, damage to houses, buildings, roads, highways or railroads. The owner of the dam should

ensure to avoid locating the dam where run-off from houses, dairies or septic systems can pollute the water.

Considerations at Investigation Stage

Technical Consideration

Site selection and site investigations are critical components to the success or failure of a dam. Regarding the technical consideration, the following important aspects should be considered:

- a. The catchment is the area of land from which run-off is to be collected. If it is the main source of water supply, make sure that it is capable of yielding enough water to maintain both, the supply in the dam and the required releases over all periods of intended use. The catchment area however should not be too large, as it will then require a big and expensive overflow system (or spillway) to safely pass excess run-off from heavy rainfall without overtopping the dam.
- b. Topographical features such as slope, width and height of dam, as well as reservoir capacity will influence construction costs.
- c. Conducting site tests to establish the material properties for the embankment and foundation.
- d. A good location for a spillway that will effectively handle runoff and minimize erosion.
- e. Watershed activities that can affect the water quality or quantity of runoff.

Environmental Considerations

Dams with their associated reservoirs can have substantial environmental effects and any existing dam or new project must comply with the Ethiopian environmental and environmental legislations and associated licensing or permit requirements. It also complies with World Bank Safety of Dam Operational Policy (OP/BP. 4.37). It should be recognized at the outset that dam developments have effects extending beyond the immediate confines of the dam and inundated areas. For example;

- Reservoir slope stability may become a dam safety issue due to the risk of overtopping caused by large volumes of reservoir water being displaced by slope failures.
- Sitting of the dam/reservoir must take into consideration the local earthquake and faulting activity which may cause breaching of the dam
- Groundwater level changes may affect stability and land use around the reservoir margins and possibly adjacent to the downstream river, as a result of changed water levels.
- Trapping of sediments in the reservoir can result in upstream shoaling and loss of reservoir storage.
- Flora/fauna effects may occur in storage basin, downstream, and in passage around and through the dam.
- Minimum flow maintenance downstream of the dam to ensure the survival of flora and fauna, and to reduce causes of stream bed deterioration.
- Social development/changes to downstream use given the changed flood situation.

Dam Design

Embankment dams Design

The single most common cause of earthen dam failures is overtopping of the embankment. An undersized spillway will lead to overtopping; therefore, spillway design is critical to reservoirs. The spillway must be located such that discharge will not erode or undermine the toe of the dam. If the banks of the spillway are made of erosive material, provision must be made for their protection. Consideration must be given to the hazard to human life and potential property damage that may result from the failure of the dam or excessive flow rates through the spillway. Further consideration must be given to the likelihood of downstream development that may result in an elevation of the hazard classification.

Extreme Events

Large earthquakes, storm/flood activity and failure of upstream dams can be considered extreme events. The risk of failure from these events is minimized by using engineering design standards and relevant guidelines incorporating adequate margins of safety. Emergency preparedness set up well in advance is the only available measure of reducing the impact when a dam failure is about to happen.

Sedimentation

The effective life of many of small dams is reduced by excessive siltation – some small dams silt up after only a few years. This issue is poorly covered in the many small dam design manuals that are available, as they mostly focus on the civil engineering design and construction aspects. Appropriate methods/tools have to be chosen to predict, and where possible reduce, siltation rates in small dams.

3. Construction of a Dam

The quality of construction is all-important to dam safety. As far as construction is concerned, the following requirements are necessary from the dam safety viewpoint:

- the contractors must be suitably experienced and committed to achieving the standards of work specified;
- the level of supervision of the works, quality assurance procedures and designer continuity, must be appropriate to the scale and complexity of the dam;
- the owner must recognize that inherent uncertainties may remain after design investigations and only be revealed during construction, and have funding in place to deal with costs arising from additional requirements identified during construction;
- any area identified in the design process as requiring confirmation by the designer during construction, must be totally under the designer's control, and no design change, however small, shall be made without the designer's review and formal approval;
- a suitably detailed design report and drawings showing the as-built structure of all components of the dam and foundation shall be developed as an on-going and integral part

of the construction supervision process, and be prepared after completion of each component so that there is a reliable record to refer to at all times in the future.

Therefore, the dam owner should ensure all the above mentioned requirements are fulfilled and complied

Selecting the contractor

The use of inexperienced contractors and/or inadequate supervision can develop into an expensive liability. Nothing can take the place of a reputable contractor, using appropriate equipment and experienced machine operators and working under supervision of an experienced engineer.

Construction Supervision

Construction supervision is an important phase of dam construction. Supervision is meant to ensure that the design factors and specification requirements have actually been included in the final product.

If foundation preparation, material selection, outlet/spillway installation and embankment compaction are not properly carried out then the safety of the dam will be compromised. So, for all small dam types (both earthen and rock fill) expected to be constructed, all the dam safety requirements applicable should be considered accordingly.

4. Safety Surveillance

Purpose of Regular Inspection

The purpose of a dam safety surveillance program is to avoid failure of the dam, by giving early warning of any kind of symptom of trouble as early as possible. It is the most economical and effective means an owner has of maximizing the long-term safety and survival of the dam. Its primary purpose is to monitor the condition and performance of the dam and its surroundings.

Frequency of Inspections

The frequency of inspection required for an effective program of surveillance depends on a variety of factors including:

- Size or capacity of the dam;
- Condition of the dam; and
- Potential for damage resulting from failure of the dam (represented by the hazard category).

Adoption of the inspection frequency for a particular dam is the responsibility of the owner, though professional advice should be sought for large dams or those categorized under significant and high hazard dams.

According to the dam safety guidelines prepared for Agricultural Growth Program, the suggested inspection frequencies for small dams of less than 15 m height for the two levels surveillance (quick visual inspection and comprehensive examination) is presented in the table below and should be followed critically.

Quick Visual Inspection	
<i>Dam Hazard Potential classification</i>	
High	twice weekly
Significant	weekly
Low	fortnightly
<i>Comprehensive Examination</i>	
<i>Dam Hazard Potential classification</i>	
High	monthly
Significant	3-monthly
Low	twice-yearly

Special Inspections

Special inspections will be required after unusual events such as earthquakes, major floods, rapid drawdown or volcanic activity. Special inspections should enable the dam owner to become aware of faults before partial or total failure occurs. Times when inspections additional to those above are recommended are:

- before a predicted major rainstorm (check embankment, spillway and outlet pipe);
- during and after severe rainstorms (check embankment, spillway and outlet pipe);
- after any earthquake, whether directly felt on the owner's property or reported by local news media (check all aspects of the dam).

Inspections should be made during and after construction and also during and immediately after the first filling of the storage.

Dealing with Problems

A systematic program of safety surveillance should maximize the likelihood that any developing conditions likely to cause failure would be found before it is too late. Surveillance will also help early detection of problems before they become major repair bills. As identified earlier typical problems (many of which are treatable if found early enough) are most likely to fall into one of the following categories: seepage/leakage; erosion; cracking; deformation/movement; concrete structure defects; and spillway blockage.

Instrumentation and Monitoring

Instrumentation at a dam furnishes data to determine if the completed structure is functioning as intended, provides a continuing surveillance of the structure, and is an indicator of developments which may endanger its safety. Typical items instrumented or monitored include;

- profiles and condition, deformations, seepages or damp areas (visual)

- reservoir water levels which relate to dam loads and flood behavior
- local rainfall which relates to background seepages
- drainage and distinguishable seepages which relate to control of leakage water flow
- Clarity of seepage flow which relates to potential erosion of embankment or foundation material.
- water pressures within the dam and foundations which relate to structural behavior
- movement or deformation of the dam surface and internal structure which relates to structural behavior
- stresses within the dam which relate to structural behavior
- seismic acceleration which relates to structural behavior

5. Operation and Maintenance of Dams

Effective and ongoing operation, maintenance and surveillance procedures are essential to ensure the continued viability and safety of a dam and its appurtenant structures. Poor operation, maintenance and surveillance will invariably result in abnormal deterioration, reduced life expectancy and possibility of failure. The proper operation, maintenance and surveillance of a dam provide protection for the owner and the general public. Furthermore, the cost of good operation, maintenance and surveillance procedures is small compared with the cost and consequences of a dam failure which could include major repairs, loss of life, property damage and litigation.

Because many small dams fail through lack of maintenance, it is prudent to have a definite and systematic maintenance plan.

The maintenance plan should be decided upon when the construction work on the dam is completed. It will affect the life of the storage if you do not maintain it properly. A good plan should include the practices to be used, as well as the approximate time of the year when they are applicable.