

SFG3027

Strategic Environmental and Social Assessment (SESA)

For the Implementation of REDD+ in Ethiopia

INCLUDING THE

OROMIA FORESTED LANDSCAPE PROGRAM (OFLP)

SOCIAL ASSESSMENT (SA)



*Ministry of Environment, Forest and Climate Change
The National REDD+ Secretariat and
Oromia REDD+ Coordination Unit*

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Acronyms

AAU	Addis Ababa University
ADLI	Agriculture Development-Led Industrialization
AEZ	Agro-ecological Zone
AfDB	African Development Bank
AGP	Agricultural Growth Program
A/R	Afforestation / Reforestation
BGRS	Benishangul Gumuz Regional State
BERSM	Bale Eco-region Sustainable Management Project
BioCF	BioCarbon Fund
BoARDs	Bureaus of Agriculture and Rural Development
CBFM	Community Based Forest Management
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CFC	Collaborative Forest Committee
CIF	Climate Investment Fund
CIFOR	Center for International Forestry Research (Indonesia)
COP	Conference of the Parties to the UNFCCC
CREMA	Community Resource Management Area
CRGE	Climate Resilient Green Economy
CSA	Central Statistics Agency
DD	Deforestation and forest Degradation
DFID	Department for International Development (UK)
EDRI	Ethiopian Development Research Institute
EFAP	Ethiopian Forestry Action Program
EBI	Ethiopian Biodiversity Institute
EIA	Environmental Impact Assessment
EF	Emission Factors
EMP	Environmental Management Plan
EPA	Environmental Protection Agency
ESIA	Environmental and Social Impact Assessment
ESIF	Ethiopian Strategic Investment Framework
ESMF	Environmental and Social Management Framework
EU	European Union
EWCA	Ethiopian Wildlife Conservation Authority
FAO	Food and Agriculture Organization
FDRE	Federal Democratic Republic of Ethiopia
FASC	Federation of African Societies of Chemistry
FASDEP	Food and Agricultural Sector Development Policy
FCPF	Forest Carbon Partnership Facility
FDMP	Forest Development Master Plan
FGD	Focus Group Discussion

FRL	Forest Reference Level
FREL	Forest Reference Emission Level
GDP	Gross Domestic Product
GEF	Global Environment Facility
GECS	Green Environment Consultancy Service
GHG	Green House Gas
GIS	Global Information System
GIZ	German Development Corporation
GOE	Government of Ethiopia
GTP	Growth and Transformation Plan
GTP2	Growth and Transformation Plan 2
Ha	Hectare
HAPPI	Horn of Africa Press Institute
HFPAs	High Forest Priority Areas
HoAREC&N	Horn of Africa Regional Environment Centre and Network
IBC	Institute of Biodiversity Conservation Ethiopia (now EBI)
ICCO	Inter-Church Cooperation Organization
IGES	Institute for Global Environmental Studies
IPCC	Intergovernmental Panel on Climate Change
IPO	Implementing Partner Organizations
IT	Information Technology
IUCN	International Union for Conservation of Nature
JFM	Joint Forest Management
JIIE	Joint Implementation and International Emissions Trading
LULC	Land Use Land Cover
MEFCC	Ministry of Environment, Forest and Climate Change
M & E	Monitoring and Evaluation
MoANR	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Cooperation
MoHUDC	Ministry of Housing, Urban Development and Construction
MoWIE	Ministry of Water Irrigation and Electricity
MRV	Monitoring Reporting and Verification
MW	Mega watts
NAMA	Nationally Appropriate Mitigation Action
NFF	National Forest Forum
NGOs	Non-Governmental Organizations
NPV	Net Present Value
NFPA	National Forest Priority Areas
NTFPs	Non-Timber Forest Products
OEFCC	Oromia Environment, Forest and Climate Change
OFLP	Oromia Forested Landscape Program
OFWE	Oromia Forest and Wildlife Enterprise
ORCU	Oromia REDD+ Coordination Unit
ORS	Oromia Regional State

PAD	Project Appraisal Document
PAGWW	Pan African Agency for the Great Green Wall
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
REDD	Reducing Emissions from Deforestation and Forest Degradation
REL	Reference Emission Level
RL	Reference Level
RLMRV	Reference Level Measurement Reporting and Verification
R-PIN	REDD+ Project Idea Note
RPP	Readiness Preparation Proposal
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
SFM	Sustainable Forest Management
SLMP	Sustainable Land Management Project
SNNPRS	Southern Nations, Nationalities and Peoples Regional State
tCO ₂	Ton of Carbon dioxide
TF	Task Force
ToR	Terms of Reference
TWG	Technical Working Group
UK	United Kingdom
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for
Africa UNEP	United Nations Environment Programme
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
URRAP	Universal Rural Road Access Program
USD	United States Dollar
VCS	Voluntary Carbon Standards
VPA	Voluntary Partnership Agreement
WaBuB	Walda Bulchiinsa Bosonaa (afaan Aromoo) Forest Management
WB	World Bank
WBISPP	Woody Biomass Inventory and Strategic Planning Project
WRI	World Resources Institute

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Executive Summary

1.1. Background

In February 2014, the REDD + Secretariat in the Ministry of Environment and Forestry commissioned this Strategic Environmental and Social Assessment (SESA) of the REDD+ Strategy. It is accompanied by a separate report detailing an Environmental and Social Management Framework (ESMF), Process Framework and Resettlement Policy Framework. This SESA study has been carried out with the aim of mainstreaming sustainable development principles into the REDD+ strategy options.

Ethiopia has prepared a Climate Resilient and Green Economy (CRGE) strategy to ensure its social and economic developments are socially, environmentally and economically acceptable and sustainable. Forestry is one of the four pillars for the successful implementation of the CRGE strategy through REDD+. Ethiopia has prepared the Readiness Preparation Proposal (R-PP) in April 2010 through a participatory consultative process, which was approved in March 2011. Ethiopia is getting closer to readiness to implement REDD+ at the national scale. This SESA is a critical requirement for the process and to guide decision making for a successful implementation of the REDD+ in a manner consistent with Ethiopia's environmental and social policies, laws and regulations and the World Bank's environmental and social safeguard policies.

Further, this SESA is a critical requirement for the process and to guide decision making for a successful implementation of the REDD+ in a manner consistent with Ethiopia's environmental and social policies, laws and regulations and the World Bank's environmental and social safeguard policies. In line with the move towards integrating social dimensions in Environmental Assessment and preparing integrated environmental and social impact assessment instruments (ESIAs). This SESA also includes sections on vulnerability assessment, specifically focusing on impacts on groups meeting OP4.101 and proposes measures for providing culturally appropriate economic and social benefits and/or avoiding, minimizing, mitigating, or compensating adverse impacts; and the process used to conduct free, prior, and informed consultations with beneficiaries/affected peoples, consistent with OP 4.10 requirements and the outcome of the consultations informs the decision/design process for the **Oromia Forested Landscape Program (OFLP)** and the National REDD+ Strategy.

There are already pilot REDD+ projects and Clean Development Mechanism (CDM) projects in the country, 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 pilot REDD+ and CDM projects in the country include the Bale Mountain Eco-region REDD+ Project (in Oromia), Nono Sele Participatory Forest Management REDD+ project (includes Oromia location), Yayu REDD+ Project (includes Oromia location), forest related CDM Projects and, lastly, the new Oromia Forested

¹ OP/BP. 4.10 is the World Bank's Operational policy on underserved peoples in Ethiopia context. The elements of IPP is included in this SESA as Social Development Plan (SDP) to include standard vulnerability analysis of groups meeting OP4.10 criteria. This vulnerability assessment is integrated in the broader SESA. It also include measures for providing culturally appropriate economic and social benefits for vulnerable groups and, where there are potential adverse impacts on these groups, measures to avoid, minimize, mitigate, or compensate for these impacts and the process used in fostering free, prior, and informed consultations for their broad support for the program.

Landscape Program (OFLP) which is detailed in this SESA.

1.2. Baseline Situation

Ethiopia is one of the least urbanized countries in the world with over 85 % of its population living in rural areas. Ethiopia has 86 ethnic groups living in different parts of the country some being forest dependent communities and are closely attached with forests for their livelihoods. Ethiopia is the second most populous country in Africa. Currently, the population is estimated at 98 million with average annual growth rate of 2.6% in 2014.

Ethiopia has great geographic diversity with high and rugged mountains, flat topped plateaus, deep gorges, incised river valleys and rolling plains. The Danakil Depression is located at 125 m below sea level while the highest mountain is Ras-Dashen with 4620 m above sea level. The drainage basin of Ethiopia is described as exoreic (eastern and western drainage systems: Nile Basin) and endoreic (Main Ethiopian Rift drainage systems: Awash River, Lake Region, Abaya-Chamo Basin, Chew Bahir Basin and Omo River).

The climate pattern of Ethiopia is mainly determined by the alternations of inter tropical convergence zone (ITCZ) and the influence of the Indian Monsoon throughout the year. Two major air streams cause dry and rainy seasons from late June to early September. Precipitation and temperature gradients are strongly dependent on altitude; while precipitation increases, temperature decreases with increasing altitude. The major agricultural soils include Nitosols, Cambisols, Vertisols and Fluvisols. The soils that are important as arable land have a total area of about 40 million hectare.

As estimated by Ministry of Environment and Forest (MEF) (unpublished document), the current forest coverage of the country is about 15 %. The natural vegetation types include 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 bush land, 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

Ethiopia is considered as a powerhouse of Africa for its high hydropower potential but only a small proportion of the potential is developed so far. Large hydro-dams are under construction with the objective of excess power export plan to neighboring countries. The road network of Ethiopia is very limited and government has recently launched

initiatives to improve the connectivity of rural-to-rural, rural-to-urban and urban-to-urban through the Universal Rural Road Access Program (URRAP) and The Road Sector Development Program (RSDP).

1.3. Forest related Environmental and Social Situations

Historical evidence shows that 40% of the land of Ethiopia was covered by forest in 1900, then dropped to 3% in 1980s and now unpublished government sources indicate the cover increased to 15%. Though there are multiple and combined factors for the deforestation and forest degradation of Ethiopia, agricultural expansion and population growth coupled with the dependency on forest and woodlands for construction and fuel wood (94% of households depend on biomass energy) are the major causes.

Small scale agricultural expansion (at the expense of forests), uncontrolled extraction of fuel wood and charcoal for energy, illegal logging and deforestation by large scale agricultural investment are some of the key environmental issues in the forest sector of Ethiopia. Examples of such activities were observed in the SNNPR, Gambella, Benishangul-Gumuz, Oromia and Tigray regions.

The forest sector has evolved and gone through various structural reforms. Attention was given since the time of Emperor Menelik II (1889-1913). At that time, crown forestlands were set aside for protection. During Emperor Haile Sillassie (1931-1974), they established the 'Rist' system as a legal and traditional land tenure system in the country with the land tenure systems different in northern and southern part of Ethiopia. The Derg (1974- 1991) government had introduced a land reform proclamation in 1975, known as "Land to the Tiller". Derg had enacted different proclamations to protect the natural resources of the country. Derg implemented afforestation/reforestation programs on private and communal lands. The 1995 Constitution of Ethiopia enabled the country manage the forest resources at different administrative tiers.

The key social issues of the forest sector in Ethiopia must be viewed from the perspective that forests are vital means of livelihoods for the rural poor in the country, though the degree of dependence of communities on the forest and forest resources varies from region to region due to ecological conditions, socio-cultural values and economic factors. Women and youth proportionally rely more on forests for their livelihoods and financial needs. Hence, programs like REDD+ need to consider gender as a key social issue to be looked at across projects. At the same time, forests provide critical ecosystem services important for the poor such as water provisioning and regulating services (for crops, livestock, households, flood control, drought resilience), climate regulation, and tangible non-timber forest products such as medicines and honey. Removing these environmental and economic benefits would amplify social risks.

1.4. Forest Governance

Forest sector governance is defined as the modus operandi by which people, stakeholder groups, and institutions (both formal and informal) acquire and exercise authority in the management of forest resources, to sustain and improve the quality of life for those whose livelihood depends on the sector. Forest governance has been recognized as one of the key issues that should be addressed to ensure successful implementation of REDD+.

There have been various initiatives to formulate legislations, decrees and guidelines aimed at guiding the sustainable management of the forest resources of the country. The change in the Ethiopian forest policy has been a dynamic process, influenced by frequent structural changes, political orientation, international environmental agreements, economic priorities and global forest related discourses.

Current land ownership in Ethiopia is regulated by the 1995 Constitution that assigned land as a state and public good. The people of Ethiopia have only user right over the land including the natural resources and are not entitled to sell land or use it as a means for exchange. The forest ownership was defined as community, private and government in the earlier regime, while the current Federal forest proclamation recognizes state and private forest ownership, although community ownership is treated under private ownership. Forest management experience in the country has been both formal and traditional. There were efforts to designate forestlands as national forest priority areas and put under strict protection. There are also traditional management systems through tree based farming.

1.5. Legal, Policy and Institutional Framework

The 1995 Ethiopian constitution is the supreme law of the land that has laid out the foundations for Ethiopia's commitment to ensure sustainable development, environmental and social safety. As a result, Ethiopia has given due attention to protect the environment and natural resources by ratifying international agreements and preparing national legal frameworks pertinent to environment and natural resources protection.

The summary of the legal, policy and institutional frameworks is presented below including international conventions relevant to the REDD+ and the OFLP, however, detail discussions is under section 8.1 of this SESA.

1. Ethiopia participated on the Earth Summit held in Rio de Janeiro in 1992 and ratified the UNFCCC convention in 1994 and became a party to it.
2. Ethiopia signed in 1997 and become a party to the United Nations Convention to Combat Desertification (UNCCD)
3. Ethiopia signed United Nations Convention on Biological Diversity (CBD) in 1993
4. The Convention on International Trade in Endangered Species (CITES)
5. Convention for the Protection of the World Cultural and Natural Heritage, Ethiopia ratified the convention in 1977 and become a party to it.
6. Pan African Agency for the Great Green Wall (PAGWW) Project, Ethiopia became a member in 2014.

The forest sector in Ethiopia has received considerable attention in the policy and development strategy of the country over the last two decades. The previous national forest policy and strategy formulated in 2007 has been revised in 2015 bringing in broader forest sector functions in terms of policy and strategy coverage. Furthermore, The Ministry of Environment and Forest has finalized reviewing the “Forest Development, Conservation and Utilization Proclamation which is expected to be ratified when new National Parliament resumes its legislation work at the beginning of October, 2015. Though not directly related to the forest sector and to the issues of REDD+, there are also policies and strategies formulated in other sectors that influence the protection and conservation of forests. The national legal and policy frameworks relevant for REDD+ include,

1. The 2015 Forest Development, Conservation and Utilization Proclamation (expected be legislated in October 2015)
2. The Forest Conservation and Utilization Policy and Strategy (revised in 2015)
3. The 1997 Environmental Policy of Ethiopia (EPE) (currently, a revision of this policy is underway byMEFCC)
4. The 299/2002 Environmental Impact Assessment Proclamation (EIA)
5. National Energy Policy, 1994
6. Water Resources Management Policy, 1999
7. Development, Conservation and Utilization of Wildlife proclamation, 2007
8. Expropriation of Landholdings for Public Purposes and Payment of Compensation, 2005
9. Rural Land Administration and Land use proclamation, 2005
10. National Social Protection Policy, 2014
11. Proclamation on Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation, 2007 and the
12. Gender Mainstreaming Policy and Strategy.

Projects and Plans

1. The Productive Safety Net Program (PSNP)
2. The Sustainable Land Management Program
3. Growth and Transformation Plan (GTP) for the period 2010/11-2014/15

The FDRE Constitution vests a power to the regional states to formulate their respective policies, raise their own revenue as well as plan and execute their own forest development activities in accordance with the framework of the overall policies of the federal government. Accordingly, different regional governments of the country have formulated their own strategies to protect and conserve their natural resources. This SESA complies with the World Bank safeguard policies related to the social and environmental safeguards relevant for the implementation of the REDD+ project are reviewed under section 8.5.7 of this report.

1.6. Analysis of the drivers of deforestation and forest degradation (D- DD)

This analysis of the drivers of deforestation and forest degradation was essential to scrutinize whether the proposed strategic options are targeted towards tackling the direct and root causes of deforestation and forest degradation. The review looked at national strategic documents and recent D-DD studies at regional and national levels. The following direct drivers and underlying causes of deforestation and forest degradation were considered pertinent and critical to be addressed in the strategic interventions.

Figure 1-Analysis of the drivers of deforestation and forest degradation

Direct drivers	Anthropogenic	• Small-scale agriculture
		• Large-scale agriculture
		• Fuel wood extraction
		• Charcoal production
		• Logging (legal and illegal, Construction wood extraction)
		• Forest coffee planting
		• Livestock grazing
		• Mining (small artesian and large scale industrial)
		• Roads and infrastructure
		• Invasive alien species
	• Fires/human caused	
	Natural	• Wild Fire
		• Climate change/Droughts
		• Pests and diseases
• Floods		

The underlying causes are those factors rooted in the economic, social, institutional, political, cultural, and governance layers with a complex cause-and-effect interaction and operating at different scales. The factors and underlying causes listed below are identified as applicable to the reality in forest loss and degradation conundrum in Ethiopian. This host of factors requires further structural and intuitional adjustments in order to bring tangible changes in curbing deforestation and forest degradation.

Figure 2-Underlying causes of deforestation and forest Degradation

Root factors	Underlying causes of deforestation and forest Degradation
Economic	<ul style="list-style-type: none"> • Commodity markets/prices • Commodity markets • Investment • Urbanization • Unemployment
Social	<ul style="list-style-type: none"> • Poverty • Livelihoods • Conflicts • Gender • Awareness/Education
Political	<ul style="list-style-type: none"> • Equity • Resource allocation
Demographic	<ul style="list-style-type: none"> • Population • Migration • Resettlement
Cultural	<ul style="list-style-type: none"> • Attitudes • Values and beliefs

Governance and Institutional	<ul style="list-style-type: none"> • Policy (land and forest) • Institutional structure • Law enforcement • Benefit sharing • Tenure and use rights • Corruption • Sectoral Synergy • Capacity
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1.7. Analysis of the proposed Strategic Options (SO) to achieve REDD+ objectives

The draft national REDD+ Strategy identified comprehensive range of strategic options for this SESA, broadly categorized into policy and institutional measures, targeted sector- based measures and crosscutting issues. They are inclusive of the different strategic options identified in the CRGE, the R-PP and the regional REDD+ pilots. The strategic options were assessed vis-à-vis the direct drivers and underlying causes of deforestation and forest degradation and they are all-inclusive and responsive to the drivers with some environmental and social risks. However, based on the social and environmental situation assessment, this SESA identified some critical gaps in the strategic options and proposed what could be considered as alternative or complementary options to address the critical gaps. The proposed and the alternative strategic options are listed below.

Figure 3-Proposed and the Suggested Enhancement Strategic Options for the National REDD+ Readiness Process

Proposed strategic options	Suggested Enhancements to Strategic options
SO1: Enhance cross-sectorial synergies and stakeholder participation	ESO1: Support the establishment and implementation of the REDD+ coordination mechanism (policies, marketing, BSM), information (i.e., strategic communication, MRV)
SO2: Forest governance and law enforcement	ESO2: Provide capacity building to local level actors
SO3: Forest tenure and property right	ESO3: Test models for community forest tenure
SO4: Land use planning	ESO4: Develop/support national, regional and local level land use planning framework and land use plans and/or watershed plans
SO5: Ensure Sustainable Forest Management	ESO5: Support afforestation and reforestation (A/R) on degraded lands and participatory forest management (PFM) of natural forests including livelihoods support.
SO6: Enhancement of forest carbon stock	ESO6: Support alternatives to address deforestation, reduce land-use based emissions and adoption of improved technologies. (See SO5 and ESO5)
SO7: Agricultural intensification	ESO7: Support adoption of improved, climate-smart farming practices and diversify and/or intensify their current production systems including provision of water points and watershed rehabilitation

SO8: Reduce demand for fuel wood and charcoal	ESO8: Coordinate with the national cook stoves and biogas programs to mitigate biomass demand
SO9: Increase wood and charcoal supply	ESO9: Enhance sustainability of wood and charcoal supply by rationalizing markets, promoting alternative wood lots as well as A/R
SO10: Improved livestock management-	ESO10: Support improved livestock management including improved breeds, value addition and marketing of livestock byproducts
SO11: Promote supplementary income generation	ESO11: Support sustainable livelihood or income generating activities for forest dependent communities using NTPFs and nonagricultural alternatives
SO12: Capacity building	N/A
SO13: Inter-sectoral coordination on planning and implementation	See SO1 and ESO1
SO14: Demand-driven research and extension linkage	Support research to enhance agricultural productivity, sustainable utilization of forest resource, alternative livelihoods
SO15: Ensure full participation and equitable benefit for women	Ensure participatory and consultative process to establish a system that responds to both women and underserved groups
SO16: Benefit sharing	Support the development of a benefit sharing mechanism where most of the benefits should reach communities and smallholders that promote adoption of more sustainable land-uses rather than cash payment; promote non-carbon benefits

The proposed strategic options have multiple environmental and social benefits that can bring significant improvement in local livelihoods and ecosystem health. Long list of the potential benefits are presented in the main text and the following are few examples provided in this summary.

<i>Environmental Benefits</i>	<i>Social Benefits</i>
<ul style="list-style-type: none"> • Contribute to significant reduction of deforestation and forest degradation; reduce impacts of large scale agricultural investment, mining and infrastructure development on forest ecosystems • Enhance the regeneration potential of threatened tree species by preventing the impacts of grazing, logging and fuel wood extraction and charcoal production, • Enhance carbon sequestration and storage in the different carbon pools (above and below ground) • Provide alternative energy sources and contribute to reducing loss of forest cover, degradation • Improve biodiversity conservation and maintenance of ecosystems services; • Reduce environmental pollution through increased buffering of important wetlands and water bodies • Enhance environmental sustainability and agricultural landscape productivity through reduced risk of soil degradation • Improve soil fertility and crop yields through improved nutrient cycling within the system and increased organic residue return • Enhance conservation of agro-biodiversity • Enhance ecosystem services and contribute to resilience towards the impacts of climate change on human and natural systems • Increase availability of fuel wood and construction wood from sustainably managed sources 	<ul style="list-style-type: none"> • Create employment opportunities for the youth and contribute to improving the role of the forest sector to the economic growth • Contribute to harmonization of policies and laws towards complementarity than competition and overlaps through improved synergy and joint planning at all levels. • Enhance participation of all stakeholders in planning, implementation and monitoring of projects and programs • Increased knowledge and awareness • of local communities on the economic, social and environmental benefits of forests • Diversify income and reduce dependency on forest resources for forest dependent communities • Increase involvement and participation of underserved communities in resource governance and decision making • Increase the roles of women in forest management and conservation through gender mainstreaming in the forest sector • Improve access to social services such as health and clean water supply • Increased food security to households

Figure 4-Proposed strategic options environmental and social benefits

The potential environmental and social risks of the proposed strategic options and the mitigation measures are provided in greater details in the respective sections, including the specificity of OFLP, and only a brief synopsis is provided below.

Figure 5-Identified Environmental and Social Risks and mitigation measures

Environmental Risks	Mitigation Measures	Social Risks	Mitigation Measures
<ul style="list-style-type: none"> • Increased deforestation and forest degradation due to absence of inter- sectoral synergy • Forest land conversion to agriculture may increase due to small holder and large scale agriculture • Poorly quarantined agroforestry species may become invasive and damage the natural environment; • Increased siltation of reservoirs; pollution from agro-chemicals may increase health risks • 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"> • Synergy and policy harmonization Coordination unit to be formed at the higher level • Replacement planting required to compensate for the loss • Establish strong quarantine centers at national and regional levels • Implement watershed management practice to protect reservoirs • Provide other renewable alternate energy sources such as solar power utilization devices 	<ul style="list-style-type: none"> • Increased forest products and NTFP prices; inefficient social service from the sectoral offices due to lack of coordination • Attractive forest tenure and property right may increase competition for land • Small holder farmers may be evicted from their holdings for investment • Loss in land use right or ownership may be induced • Already fragment land use may reduce productivity and cause food insecurity • Increase mineral fertilizer dependency incurs cost to the poor and local communities; 	<ul style="list-style-type: none"> • Enhance synergy; facilitate for the creation of alternatives for the forest product and NTFP • Implement land use plan, effective law enforcement to deter competition for land at all administrative levels • Organize local community user groups through tested models (e.g., PFM, forest user associations), and grant clear use right over forest resources • Use compensation mechanisms both in kind and other means • Increase productivity per unit area through improved input use (seed, fertilizer, etc.). • Integrate suitable agroforestry species • Encourage agriculture intensification using organic fertilizers such as compost • Supply of energy efficient cooking and baking gadgets at subsidized price; avail electricity and solar devices at affordable price by the community

1.8. Observations and Recommendations

General Concerns and Recommendations

Concerns

- The REDD+ program has technical and institutional interventions, management arrangements, benefit sharing mechanism to address the prevailing social and environmental problems entangling the forest sector in Ethiopia to effectively reverse the millennial process of deforestation and forest degradation, if rightly implemented with the required institutional reforms. The causes of deforestation are deeply rooted in the economic, social, institutional, cultural, and political and governance layers of the country. The strategic options are designed to address these drivers at the respective scales and the impacts of those options are largely positive.
- The level of awareness on REDD+ is generally low in the regions. Conducting awareness creation workshops, distributing promotional materials, in appropriate languages and culturally sensitive manner, and expanding support for local capacity building on forest sector development and law enforcement should be part of the preparedness process.
- There is sufficient and accumulated positive experience in the country on the practices of area closures for environmental rehabilitation and biodiversity restoration. In some cases, farmland closures are also introduced and successful results are reported. The practice of free grazing is a serious challenge for sustainability, and most closures target overuse of lands by livestock principally cattle.
- As the rural mass largely depends on biomass energy source (particularly fuel wood and charcoal) for cooking and lighting, much of this is extracted from the natural vegetation including high forests and woodlands.

Recommendation

- It requires commitment and strong will at the political level and work strategically to bring social and behavioral change. Thus, for a successful implementation of the REDD+ program, continued engagement and dialogue with the stakeholders using the national consultation and participation plan is essential to bring about appropriate reforms in the legislative and policy instruments and the implementation mechanisms.
- Areas of capacity building should cover the wider community, local governments, and investors on the role of forests in mitigating the looming climate change impacts, enhancing local livelihoods, environmental and social stability, agricultural productivity and on the significance of law enforcement.
- Thus, variety of measures that may improve productivity and reduce the number of heads of livestock (e.g., improving productivity through improved breeds, better access to market and value addition to products, i.e., packaging, processing, etc...) may address the grazing problem. Reducing the impact of free grazing, through stock control and increasing tie-and feed system is essential to improve sustainable forest conservation and degraded area rehabilitation.
- Agricultural intensification is feasible in highlands and lowlands in the current context, according to the information collected from the field observations.

Nevertheless, availability of inputs and technology (equipment for line seeding or row planting and fertilizer application) are critically lacking. The other (this comes out-of-the-blue) barrier will be the availability and cost of inputs, particularly improved seeds and capital.

- Promote initiating and engagement on commercial tree planting such as community forests and industrial plantations; and such initiatives have to start with piloting with interested groups, farmers associations and local administrations. Positive results from such pilots can be scaled up later.

Environmental Concerns and Recommendations

Concerns

- Invasive alien species are serious environmental and social threats in most parts of the country, particularly in Afar and Borana areas, causing biodiversity degradation and loss.
- Forest demarcation is essential to protect and conserve the existing forests from further deforestation and forest degradation. The SESA study confirmed that demarcated forests under the jurisdiction of the Oromia Forest and Wildlife Enterprise (OFWE) are being cleared on daily a basis and changed to 'coffee and enset' farms (e.g., in Odo Shakiso Woreda of the Oromia region). OFWE has been unable to enforce or implement existing laws to protect the forest and the local administration have no resources to carry out meaning corrective actions at the local level.
- The GoE (2014) revised forest definition excludes shrub lands, which covers quite extensive area in the country and this might instigate clearing such vegetation for other land uses or it might lead to the replacement of such natural vegetation with (plantation of) exotic forest species.

Recommendations

- Strategic interventions should consider controlling the expansion and dissemination of such species into new environments and support the eradication efforts. In addition, the quarantine system of the country needs to be revisited and strengthen in order to prevent the introduction of new invasive alien species (IAS) into the country.
- Thus, forest demarcation has to be done very cautiously. It is generally recommended that the regional forest enterprises (OFWE, Amhara Region Forest Enterprise) have to get strong local support to enforce laws and to rightly administer the forest concessions.
- Closely work together with the Ethiopian Roads Authority and the Ministry of Mines in order to have accurate estimates of the destruction and thus, to avoid where feasible, or minimize exploring all viable alternative project designs to avoid such destruction in the future. This also requires joint planning and implementation among the respective institutions.

- The GoE (2014) revised forest definition excludes shrub lands, which covers quite extensive area in the country and this might instigate clearing such vegetation for other land uses or it might lead to the replacement of such natural vegetation exotic plantation forest species.

Social Concerns and Recommendations

Concerns

- The experience in the country for benefit sharing is not well developed. The proceeds collected from different sources in different types of forest conservation associations (e.g., PFM and Joint Forest Management (JFM)), are not properly shared to those who have formed the legal associations. While building on the models of Humbo, Soddo, PFMs and JFM care should be taken to develop a good model.
- Gender disparity is a reality when it comes to resource ownership and entitlement for women and men, especially in the rural areas. Hence, women are economically and culturally disadvantaged groups, which often lead to women being engaged in exploiting “free access” resources to generate their own income (e.g., fire wood and other forest products).

Recommendations

- The benefit sharing mechanisms in existing forest management initiatives should be piloted before scaling up to increase the chances of designing a better benefit sharing mechanism for REDD+ and OFLP.
- Development opportunities accruing from the REDD interventions should benefit both women and men equally.
- The OFLP’s anticipated social impacts have triggered World Bank OP/BP 4.12 and OP/BP 4.10, and the Oromia program has put in place mitigation mechanisms acceptable to the World Bank to mitigate these impacts. For impact on land and properties, the Resettlement Policy Framework (RPF) will be used and for involuntary restriction of access⁹ to legally designated parks and protected areas, a Process Framework (PF) will be used to address any potential impacts, which are expected to be site specific. The Bank’s OP 4.10 is triggered based on the screening conducted by the World Bank and reinforced by the constitution of Ethiopia, which indicate that the majority of the target population identify themselves as having the characteristics defined under OP 4.10. Therefore, issues relating to PAPs meeting the OP 4.10 requirements is defined in detail through “Enhanced Social Assessment and Consultation,” (part of this SESA) which identified social issues and economic opportunities for the underserved groups. Key stakeholders have been consulted in the Woredas, Kebeles and communities, including identified vulnerable and undeserved groups to seek their broad support for the OFLP and the importance of this program to themselves and their families. The findings of the enhanced social assessment and extensive consultations, including measures to ensure the provision of grievance redress, and benefit sharing issues, and the identified mitigating measures are incorporated in the design of OFLP.

Legal, Institutional and Policy

- The Federal forest proclamation designates forest ownership as state (government) and private, although community ownership is treated under private ownership. Some of the regional proclamations recognize private and community ownership separately (e.g., Oromia region). However, the necessary guidelines and regulations are not yet in place to attract private investment into the forestry sector. Thus, there is a need to prepare implementation guidelines and regulatory frameworks, which is crucial for involvement of the private sector and individuals.
- It might be beneficial if the height of a tree in the definition be lower than two meters so that important shrub vegetation species, which often have a height of less than two meter, and such vegetation types will be saved from destruction.
- Although REDD+ is recognized as an instrument in the CRGE to achieve the forestry sector emission reduction objective, other sectoral project formulations and implementations need to be aligned with the CRGE to reduce emissions and maximize a carbon neutral development gains.
- Review of the existing environmental instruments and discussions with stakeholders revealed that although there is an EIA proclamation (Proclamation No. 299/2002 for addressing project based impacts), but Ethiopia generally lacks policy or legal framework on strategic social and environmental assessment (SEA) to evaluate undesired social and environmental outcomes of strategic development programs. This may pose a challenge in the proper implementation of the SESA/ESMF in the future. There is a need to formulate strategic social and environmental assessment policy and implementation guideline to fill the gap. The current review process of the EIA proclamation by MEFCC should take into account this gap and put an effort to address it through the review process.
- Review of the national draft ESIA (Environmental and Social Impact Assessment) guideline indicates that the guideline has essentially missed concepts on REDD+. It is highly recommended that the draft ESIA guideline should include environmental and social issues of REDD+.
- Discussion with stakeholders and client as well as reviewing the relevant available documents revealed that Ethiopia has no ESA (Environmental and Social Auditing) guidance. But currently MEFCC is said to have started working on the preparation. Generally, it is recommended that the country should develop its own ESA guideline for carrying out environmental and social audit of the REDD+ projects.
- In the EIA Proclamation No.299/2002, development projects including agricultural investments that have impact on forest resources are required to undertake EIA and the report to be reviewed by the competent agencies (regional or federal environment offices). The proclamation mandated the competent Federal agency and Regional environment bureaus to review the EIA reports to avoid conflicts of interest. Against this legal provision, the Federal agency (now MEFCC) transferred its mandate to the implementing and/or investment licensing sectoral Ministers to provide environmental clearance to projects. This misinterpretation of the proclamation needs to be reviewed and corrective measures have to be taken accordingly.
- Proclamation No. 691/2010 vests power to the MoA to protect natural resources

and conserve biodiversity. There is no clear definition of natural resources that it is mandated to protect and conserve. This is an example of overlap in mandates with the other sectors like MEFCC and will create gap in addressing key problems around the forest resources.

- Strong synergy is needed among the relevant institutions and organizations not only the traditional vertical relationship but also horizontal.
- Inclusion of traditional local institutions (e.g., *Aba Gadaa*, in Oromia, *Gepitato* in Sheko) will contribute to the successful implementation of REDD+ projects. The adoption of forest conservation experiences from the local forest user associations such as *WAJIB* and *WaBuB* will significantly contribute to the successful implementation of REDD+ projects.
- There is a clear gap in cross-sectoral coordination in joint planning and implementation of projects and programs. This needs to be seriously looked at and synergy coordination office should be established and be accountable to a higher level of government.
- The REDD+ program (both national and Oromia) needs to build on the experience gained by some NGOs, such as FARM Africa, SOS-Sahel and World Vision Ethiopia and Ethio- Wetlands, in preparing and implementing pilot REDD+ and CDM projects, closely work with them in future projects.

1. Introduction

1.1. Background

Reducing Emissions from Deforestation and Forest Degradation, and enhancing forest carbon stocks (REDD+) has become one of the global instruments to curb greenhouse gas emissions and to mitigate climate change. REDD has gained ground after the Bali decision (Bali Action Plan, 2007; COP 13) and it is implemented in developing countries, those with forest resources and facilitates financial mobilization for the implementing countries. REDD+ drives a low carbon-growth by avoiding emissions from forestland and contributes to biodiversity conservation and poverty reduction.

The Forest Carbon Partnership Facility (FCPF) under the World Bank provides support to those countries engaged in the preparation of readiness plans and subsequent implementation of national REDD+ strategies to reduce deforestation and forest degradation. Ethiopia has been participating in the FCPF since 2008 and prepared the Readiness Preparation Proposal (R-PP) in April 2010 through a participatory consultative process, which was approved in March 2011.

With the financial support from the FCPF, Ethiopia has put in place the national readiness management structure and prepared the national REDD+ implementation framework. Since the forest sector development is one of the key pillars of Ethiopia's Climate Resilient Green Economy (CRGE), the REDD+ program is an important propeller to achieve the forest sector development objective in particular and the economic development in general.

Ethiopia has been implementing the R-PP in the last few years and one of the expectations during the readiness process is to ensure proposed strategic programs and activities “do good” to society and the environment while trying to enhance benefits to local communities and forest ecosystems. Thus, the FCPF requires countries participating in the Readiness and the REDD+ activities implementation to undertake a Strategic Environmental and Social Assessment (SESA) to identify and compile the potential impacts from national REDD+ programs and policies, and to formulate alternatives and to develop mitigation strategies.

SESA is a tool that uses a range of analytical and participatory approaches aiming at integrating environmental and social considerations into policies, plans and programs and evaluates the inter-linkages with economic and institutional considerations. SESA supports the design of the national REDD+ policy framework, including the National REDD+ Strategy. SESA offers a platform for consultations with stakeholders from the higher to the micro-levels. SESA is complemented by an Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF) and Process Framework (PF) which establishes the principles, guidelines, and procedures for reducing, mitigating, and/or off-setting potential adverse environmental and social impacts, enhancing positive impacts and opportunities, and otherwise guiding potential investments towards compliance with relevant safeguards.

In the preparation of this SESA, preliminary results from the national study on the drivers of deforestation and forest degradation has been used in assessing the impacts of the REDD+ strategic options. Besides, relevant inputs were taken from the strategic options proposed in the

national R-PP document, the draft national REDD+ strategy, strategic options proposed in the study of the drivers of deforestation and forest degradation for the Oromia Forested Landscape Program (OFLP), and the study for deforestation and forest degradation for the Bale REDD+.

1.2. Objectives of the SESA

The general objective of the SESA aims to ensure that strategic environmental and social assessment principles are applied to integrate environmental and social considerations into Ethiopia's REDD+ readiness process in a manner consistent with Ethiopia's environmental laws and regulations and the World Bank's environmental and social safeguard policies, and associated risks are addressed from an early stage in the process of formulating REDD Policy and programs, and incorporated throughout the process.

The specific objectives of the SESA are to identify opportunities that:

- Facilitate an understanding of the operating environment for REDD+ programs, including stakeholder analysis and the socio-environmental dimensions of the forestry sector in Ethiopia;
- Identify potential environmental and social impacts related to REDD+ programs in Ethiopia; (the SESA process should ensure full coherence and coordination with the ongoing institutional and legal assessment, including benefit sharing for REDD+ in Ethiopia, led by the Government of Ethiopia);
- Design enhanced stakeholder's consultation and participation approach to mitigate and/or enhance the identified impacts;
- Suggest methods and measures to mitigate environmental and socioeconomic risks during REDD+ strategy implementation.
- Assess key socio-economic factors that require consideration, specifically for Oromia Regional State; identify vulnerable and historically underserved groups that may be included/excluded from the OFLP and be adversely affected as a result, and proposes necessary impact mitigating measures towards addressing World Bank requirements on social safeguards triggered by the program (OP/BP 4.10 and OP/BP 4.12).

The SESA is being carried out to ensure that the implementation of the REDD+ mechanism contributes positively to sustainable forest management in line with the objectives of Ethiopia's 2012 Forest Policy (MoARD, 2012). In addition, the SESA would contribute towards Ethiopia's overarching goal of environmental sustainability, climate change, economic growth, job creation and poverty alleviation programmes. With this in mind, the purpose of the SESA is to ensure operational integration of environmental quality objectives, economic efficiency principles, and social and gender equity goals into the REDD+ strategy options.

2. REDD+ Mechanism and indicative strategic options

2.1 History of REDD+ under the UNFCCC Negotiations

The following is a synopsis of the evolution of the mitigation mechanism for REDD+ in the context of more than 20 years of climate change negotiation under the UNFCCC. The main decision-making body of the UNFCCC, the Conference of Parties (COP), annually reviews the work of the Convention.

1. *December 1997* - Under the Kyoto Protocol, the COP adopted an international agreement linked to the UNFCCC, the Clean Development Mechanism (CDM) was agreed as a financial mechanism to facilitate GHG emissions reductions. At its third meeting in 1997 in Kyoto, the COP adopted the Kyoto Protocol, a legally binding international treaty aimed at reducing the signatories greenhouse gas emissions by 5.2% below 1990 levels by the year 2012.
2. *February 2005*: At COP 11 in Montreal, the proposal for a mechanism for Reducing Emissions from Deforestation in Developing Countries received a wide support from Parties and the COP established a contact group and thereafter began a two year consultation period to explore options for REDD.
3. *December 2007 (COP 13)*: During COP 13 in Bali, Indonesia (2007), the Bali Action Plan called for the needs of local and underserved communities to be addressed, as well as the role of conservation, sustainable management of forests and enhancement of forest carbon stocks, (IUCN 2009) two phrases that transformed REDD into REDD+. Same year, two multilateral fast start mechanisms namely, the Forest Carbon Partnership Facility (FCPF) of the World Bank and UN-REDD, were launched with the aim of providing financial and technical support to national REDD initiatives.
4. *December 2008*: During the COP 14 meeting in Poznan, Poland, the concept of REDD+ was adopted following pressure from countries who wished 'conservation, sustainable management for forests and enhancement of forest carbon stocks' to be given the same level of priority in the negotiations as deforestation and forest degradation.
5. *December 2009*: During the COP 15 meeting in Copenhagen, Denmark, the COP 15 report states that developing countries should receive methodological and technical guidance related to REDD+ activities. And the Copenhagen Accord identified REDD+ as a critical component of a broad strategy to address the problem of climate change.
6. *December 2010*: During the COP 16 meeting in Cancun, Mexico, a REDD+ text was adopted on the scope, scale, national strategy, safeguards system, monitoring system and MRV. A REDD+ partnership and the 'Cancun agreements' was reached. In the same year, Brazil and Indonesia defined voluntary REDD targets.
7. *December 2011*: During the COP 17 meeting in Durban, South Africa, various sources of finance and 'appropriate' market-based approaches were considered and safeguards and reference level texts adopted.
8. *December 2012*: During the COP 18 in Doha, Qatar, while no decisions were made related to REDD+, the issues of climate change had been discussed in depth.
9. *November 2013*: During the COP 19 meeting in Warsaw, Poland, the "Warsaw Framework for REDD+" was adopted to provide guidance on how countries can harvest available data to create reliable snapshots of their forests over time and to use these snapshots to create deforestation reference levels that are recognized by the UNFCCC.
10. *December 2014*: COP 20 was in Lima, Peru. Developed countries wanted "nationally determined commitments" to focus only on mitigation, while many developing countries pushed to include adaptation and finance too. Many developing countries insisted on

maintaining the stark differentiation of the past, but developed countries refused. In the end, the Lima decision largely sidestepped the issue, which is certain to be a central challenge in reaching an agreement in Paris.

11. November 30 to December 11, 2015: COP 21 will be in Paris, France. Foreign Minister of France on 29 August 2014 disclosed that France focuses on the adoption of a legally-binding agreement, subsequent pledges by all countries, the Green Climate Fund (GCF) and carbon pricing.

2.2 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 has been an active participant in international climate negotiations and initiated and implemented 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 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. 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. 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 and Forest is the prime unit for the coordination and implementation of the National REDD+ Readiness process.

2.3 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, describe 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 state, 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 Hogg 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 Wollo (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 Wollo 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.

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). 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 (Mekuria Argaw, 2005).

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).

2.4 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.

A. Direct drivers and agents

In Ethiopia, the main drivers and agents of deforestation and forest degradation are (i) Nature in combination with human actions; (ii) Agriculture; (iii) Forestry; and (iv) Livestock. These drivers and agents are briefly discussed below.

Nature in combination with human actions: Most of the nature-based drivers causing deforestation and degradation are promoted by the human actions, which sensitize land areas, for example, to erosion. On lowlands the land-fires is the most prominent driver. As they are set by man on most occasions and thus are avoidable with the secured land tenure and environmental awareness campaigns. The lowland drivers of deforestation and degradation are characterizing Gambella, Benishangul-Gumuz, Tigray, Afar, Somali and SNNP regions. In Amhara, SNNP and in parts of Benishangul-Gumuz land-fires are declining, while in Gambella and other parts of Benishangul-Gumuz, and Afar the land-fires are increasing. High altitudes and steep slopes subject to erosion are in Oromia, Amhara, Tigray and SNNP regions.

Agriculture: There are several kinds of agriculture practices, which can be listed as drivers of deforestation and degradation. The most significant one is the *large-scale investment agricultural schemes* – both private ones and state owned ones. These have been established in Gambella, Benishangul-Gumuz, Afar and some other regions during the last ten years and their environmental consequences have been hugely negative in all cases. The negative consequences relate foremost to the fact that these schemes are established in dense forest areas instead of grasslands or other land with less forest. The other significant agricultural issue is *small-holder farmland expansion*. Most of the small-holder farming resettlement schemes are likewise established on forest lands and are therefore also environment unfriendly. However, their negative impacts can be substantially reduced by promoting agroforestry practices. The same is true for traditional shifting cultivation where tree stumps are left in the fields and no proper ploughing is conducted. The main problem with shifting cultivation is the excess use of fires to clear the land. Dry vegetation burn intensively during the dry season and flames can kill all tree seedlings and trees.

Forestry: Forestry-related drivers of deforestation and degradation are usually illegal and often criminal in nature and conducted by persons who are ignorant of the environmental consequences they cause. The worst kinds are the illegal timber cuttings in the last remaining high forests, for which one can blame a number of corrupt officials, businessmen and wood traders. In addition, except in Tigray and in some parts of Amhara where the cultivation of plantation wood on farmers' own land has been able to supply most of the fuelwood needed, in all other regions there is a huge pressure on the local native forests for fuelwood. Further, charcoal is another problematic issue, as it is required about six times the amount of wood to produce 100kg of charcoal, thus 600kg of fuelwood is required. In more developed regions of Ethiopia the charcoal is illegally produced from natural forests and woodland trees, and most of the charcoal ends up to be used in regional towns. In Somali and Afar region charcoal is produced by almost all rural households as one of the core livelihood income sources.

Livestock: Livestock free grazing/traditional livestock rearing has negative impacts on deforestation and degradation in many places, including destruction of tree seedlings. However, it is under change in many parts of Ethiopia towards stall-feeding or feeding tied to a removable pole. An exception from this rule seems to be Amhara region in some areas.

B. Underlying causes

The main underlying causes of deforestation and degradation are population growth and land tenure issues. Please see below for further information.

Population growth

With more than 90 million inhabitants (2015), Ethiopia is the most populous nation in Eastern Africa and the second-most populous in Africa after Nigeria. With an annual population growth of more than 2%, Ethiopia will have more than 120 million people by 2030. Over the past 50 years poor rural families have not got sufficient social security support and turned therefore to various other kinds of social security net surrogates. These surrogates have been, for instance, large families, which provided sufficient household labour for a common family livelihood. Secondly, the families in villages and town communities have support each other during the difficult times. The third social security net surrogate has been exploitable forests, which could provide many goods and services free of charge such as wood energy, construction wood, food and fodder, new farm and housing land and drinking water.

Now this path has been driven to the limit and in many regions, zones and woredas almost all available land has been taken into household use except the last remaining patches of forests, which are now under heavy pressure from desperate poor families. Such desperate poor families may not have anything to lose when they are encroaching into degraded forests to start up cultivating chat or coffee or something else, which is able to secure them a living. Factors such as overpopulation, poverty and lack of other income sources are core issues behind the deforestation and degradation.

Land tenure: As long as there is no real responsibility among the local population for the common forest resources and forest laws and regulations are not enforced, it is impossible to stop another person from exploiting forests. With land registration, individual households will get user right certificates and would be able to defend their land and natural resources outsiders coming to cut trees and degrade their land. The ongoing GoE land certification program has started to impact favorably on deforestation and degradation. Furthermore, local people with some environment awareness, living in an area usually take better care of their landscape than people, who come from the outside with economic interests only. The government is working to scale up the practice of participatory forest management, where the local communities are organized in forest users groups and cooperatives to assume the responsibility of managing and using the forest resource in accordance with the agreement they entered with the government.

C. Mitigating actions

Today there are already many mitigating actions in use, which aim to reduce deforestation and degradation, including watershed management, agricultural intensifications, trees on farm, Livestock management and Non-wood and alternative energy sources. Please refer to the *Study of causes of deforestation and forest degradation in Ethiopia and the identification and prioritization of strategic options to address those* (MEF, 2015) for further information.

2.5 OFLP- Oromia D-DDs

The dynamics of deforestation are complex and not easily reduced to a single factor or linear explanations. The variability of actors, situations and relationships calls for localized analysis in forested areas. However, deforestation finds its root causes in global trends and drivers are often found 'outside the forest'. Direct drivers of deforestation and forest degradation are human activities and actions that directly impact forest cover and result in the loss of carbon stocks. Underlying causes or indirect drivers are a complex of economic issues, policies, and institutional matters; technological factors; cultural or sociopolitical concerns; and demographic factors.

The primary drivers of deforestation and forest degradation in Oromia region can be categorized into direct and indirect drivers. The former includes **small-scale conversions for agricultural expansion** and **wood extraction for firewood and charcoal** purposes that are carried out by investors and small scale farmers/pastoralists. The latter includes **ineffective land-use planning** and enforcement at micro-level, and **inadequate cross-sectoral policy and investment coordination**.

Direct Drivers

The main direct driver of deforestation is agriculture; of which small-scale and commercial/large-scale agriculture accounts 85 % and 15 % of the loss, respectively. In terms of degradation, wood fuel is the main driver affecting forests, with roughly 68% of degradation emissions attributed to wood fuel collectors/producers.

Small-holder agriculture: Expansion of small-scale cultivation systems has been identified as a major driver of deforestation and forest degradation in both moist and dry forests. Subsistence agriculture is the main economic activity throughout Oromia, with farmers cultivating a diversity of crops depending on the local livelihood systems. Main crops include barley, wheat, beans, potatoes, and cabbage in the highlands and bananas, maize and teff in the lowlands. The choice of crops in smallholder agricultural production systems results in different impacts on forest cover as farming techniques vary with different crop combinations. Some crops result in more forest conversion or forest degradation, such as khat (Unique, 2014). Farmers' decision for which crops to plant is influenced by a range of factors, including agro-ecological characteristics of the land, proximity to markets, consumption preferences, and price fluctuations. For example, enset - a banana type found in southern Oromia near the border to SNNPRS - provides a higher amount of foodstuffs per unit area – enset has helped to support a dense population in the southern region in general – as compared to many other crop choices, especially cereals and maize. The shift in consumption patterns in both rural and urban areas from tubers to cereal crops (often conceived as modernization) demands larger plots and is less likely to be integrated with other land uses such as forest or crops (Wakjira, 2010). Many poor farming households respond to declining land productivity by abandoning existing degraded cropland and moving to new lands for cultivation. Therefore, one of the main reasons for the destruction of natural forests are unsustainable agricultural practices which transforms forested landscapes into mosaics of managed and unmanaged ecosystems, resulting in habitat loss and fragmentation for many species of flora and fauna. The majority of small-scale farmers operating

in Oromia's forest are engaged in coffee production. Current coffee prices lie around US\$ 1.76/kg (30 ETB) for clean coffee at the farm gate. The response of small-scale coffee farmers to global coffee price increases has been systematically analyzed by a number of studies, with mixed results. In the case of Alemu & Worako (2009), coffee growers were found to benefit little from positive changes in world price, as this price fluctuation is mainly absorbed in the coffee auction markets. These authors attribute the lack of producer price response to world price fluctuations to the use of the domestic market as a major coffee outlet at times of lower world prices

Wood extraction for firewood and charcoal: Extensive extraction of fuel wood for both commercial and subsistence purposes is a driver of degradation throughout Ethiopia. The demand for wood fuel in 2009 was 77 million m³ against 9.3 million m³ of sustainable supply (Beleke, 2011). More than 40% of the annual charcoal supply to Addis Ababa is from the Rift Valley areas (Alem et al., 2010 as cited by Benzin & Serk, 2013). The activity is aggravated by inefficient traditional charcoal production technologies. Fuel-wood extraction is most prominent in surrounding urban areas, as these areas have high demand for fuel-wood. The extent of biomass scarcity is exemplified by the long travel distances currently required for wood collection. Most charcoal and wood fuel production are conducted informally without any license. Charcoal trade is characterized by weak law enforcement as the capacity to enforce regulations and effectively collect revenue is low (Beleke, 2011). The vast majority of households depend on wood or charcoal for domestic energy consumption, using wood for cooking, heating and lighting. Traditional biomass (wood, charcoal, dung) accounts for roughly 90% of total primary energy use in Ethiopia and about 84% and 99% of urban and rural households, respectively, rely on biomass as their primary cooking fuel (Johnson & Mengistu, 2013). Charcoal is made using traditional earth mound kilns which incurs considerable losses, entailing four or five times as much energy input as would be required for burning wood directly. Many account the loss of acacia woodland in the Central Rift Valley area to mainly charcoal production and firewood extraction. According to Ethiopia's recent Biomass Energy Strategy developed by the Ministry of Water Irrigation and Energy (MoWIE), there is a massive increase in charcoal consumption in the past 15 years due to the significant increase in rural incomes, proliferation of rural markets, improved road system and reduced transportation costs and the limited land for growing trees surrounding urban areas.

Indirect Drivers

The analysis pursued by Unique² on selected woredas, and the analysis carried out by Climate Focus³, combined with a literature review concludes the main underlying causes of deforestation and degradation in Ethiopia are population growth and migration; **ineffective land-use planning**; and **inadequate cross-sectoral policy and investment coordination**, specifically changes in policies linked to land tenure and agricultural intensification, market drivers, environmental degradation, poverty, food insecurity and infrastructure development. As well as issues of rule of law, law enforcement and government capacity on-the-ground, land tenure and the land licensing and certification process, and government policies related to the Growth and Transformation Plan and Master Land Use Planning for the Oromia region.

Ineffective land-use planning. Land-use planning is an important tool to support REDD+ by promoting environmentally sustainable, socially sound and economically viable land uses, and by directing economic activities to where they are most suited. The Oromia Rural Land Use and Administration Proclamation provides a framework for rural land administration and mandates the

² Unique. *Strategy Options for the Oromia Forested Landscape Project*. Final report, Addis Ababa, 2014

³ Climate Focus. *Legal and Institutional Framework for Oromia Forested Landscape Program*. Final Report, Addis Ababa, 2015.

Oromia Bureau of Rural Land Environmental Protection (BoRLEP) to develop a Master Plan for land-use. To-date, Oromia BoRLEP has completed nearly half of the ‘land resource mapping process’, which constitutes the main ground work for land-use planning. Upon approval by the Oromia Regional Administrative Council, the proposed land uses will be legally binding. The Oromia Forest and Wildlife Enterprise (OFWE) has demarcated large parts of the forest area under its responsibility. Some areas however remain either outside its concession or cannot be demarcated until the completion of Oromia BoRLEP’s resource mapping process. There is a lack of harmonization and consistency between the various existing processes, which currently follow divergent methodologies and technologies. To speed up and strengthen land-use planning in Oromia, OFLP will support a consultative policy process to facilitate a common understanding among various stakeholders about its purposes, goals, and process. This process will also help develop procedures that clarify the roles and functions of the different institutions and stakeholders. To effectively fulfill their functions, the capacities of Oromia BoRLEP, OFWE, Oromia Bureau of Agriculture, and the local administrations should be strengthened.

Also, an effective **land tenure system** provides clarity over ownership and other land rights, allows the identification of relevant actors, incentivizes long-term investments (financial or otherwise) in sustainable management and enables actors to successfully manage their land without interference from intruders. The Oromia Forest Proclamation recognizes, in addition to the state and private forms of forest and land-use rights recognized by the Federal Forestry Proclamation, communal administration and land-use rights over forest. Oromia legislation provides for holding certificates demonstrating proof of land-use right. Land-use rights cannot be sold or exchanged, though they may be bequeathed and up to half of the land may be leased. Several issues impair tenure security and efforts to improve it. The inability to transfer ownership creates some insecurity for private investors, which can hinder efforts to promote REDD+-related investments. There has also been limited focus on assigning land-use rights to communities. OFLP will support the adoption of guidelines on the implementation of communal land certification processes and dedication additional resources to the implementation of these guidelines, as well as an increased community outreach that creates awareness about land rights, in particular in support of PFM.

Inadequate cross-sectoral policy and investment coordination. Effective REDD+ implementation depends on cross-sectoral coordination and the development of relevant capacities among institutions overseeing forest and land administration. In Oromia, effective implementation is currently hindered by the lack of cross-sectoral coordination and by overlapping mandates. While OFWE’s formal mandate over forests in Oromia is broad and includes both commercial and non-commercial activities, its structure as a profit-oriented state enterprise has its focus on commercial activities. Coordination would be ensured through a proposed multi-sector coordination platform, the Oromia REDD+ Steering Committee, chaired by the Oromia Bureau Head, for land-use issues.

Oromia through the OFWE is among the pioneers of the regional states of Ethiopia with more than eight hundred thousand hectares of forest under **Participatory Forest Management**. PFM presents an opportunity for REDD+ as it can facilitate forest conservation, development and utilization through community participation. Oromia's forest legislation provides a relatively favorable legal framework, yet the success of PFM has been constrained by the lack of livelihood benefits provided to local communities. The opportunity that sustainable forest management presents for enhancing livelihoods of local communities is hardly considered and constrained by the absence of suitable local implementation structures. To strengthen the sustainability of PFM schemes, OFLP will support an increased focus on forest management agreements as well as ecologically and economically sound forest management plans. To strengthen PFM implementation, OFLP will support the adoption of a PFM regulation that clearly defines institutional roles, a review framework, minimum requirements for forest management planning and agreements, among other elements.

Projected Deforestation

Regarding projected deforestation and degradation in forest areas large-scale commercial farming is often unable to expand due to the large amounts of land already occupied by small-scale farmers. Expansion of traditional small-scale agriculture is expected to continue in forested areas due to population growth and the continued effects of previous resettlement programs. This is combined with increasing wood and forest product extraction in the forested areas, which sparks a forest degradation process that renders deforestation of previously unviable areas more interesting for conversion to agriculture.

In general, woodlands will be adversely affected by improved transportation networks combined with technological improvements such as irrigation and economic development focused on increasing total agricultural production. The commercial agriculture development plans outlined in the country's development strategies will most likely affect the woodlands, especially the high woodlands in the Northwest as the edaphic and rainfall conditions are most suitable to agriculture. Woodland degradation due to increasing livestock production is at highest risk in the low Borena woodlands as adverse effects of climate change are expected to continue unabated, leading to augmented impact of livestock grazing. See Figure 1 below for high risk sites of future deforestation/degradation in the region.

In conclusion, the main causes of deforestation and forest degradation stem from growing demand for land and forest products and the inefficiency of sustainable resources management due to the economic, social, and policy/institutional constraints, among others. The growing demands for land and forest products are linked with small-scale subsistence, cash crop agriculture and commercial coffee (which are mainly affecting moist and dry forests); commercial agriculture expansion affecting high woodlands; and fuel wood collection and livestock affecting moist forest, dry forests, high woodlands and low woodlands (Unique/Conscientia, 2014).

Figure 6-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	Small-scale cultivation	Deforestation	Small-holder farmer
(Moist and dry high forests)	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
- This process is accelerated by rising commodity prices, improving road networks, rising populations and other economic development factor

2.6 Review of REDD+ Strategy Options for Ethiopia

The REDD Preparation Proposal (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.

Figure 7-Existing strategies as reviewed and presented in the R-PP

- Plantation forest of exotic species (especially *Eucalyptus* and *Cupressus*)
- 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, 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.

Figure 8-Strategic options as reviewed and identified by EDRI 2010 to mitigate deforestation and forest

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 Mha 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 below.

Figure 9-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.
- 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 and regulatory activities backed by local communities;
- 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 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.

Figure 10-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 REDD+ Program by OFWE focused on three main sectors: agriculture, forestry and energy as shown in the Box below.

Primary causes of deforestation in Oromia		OFLP Interventions	Source of Funding
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. 	<ul style="list-style-type: none"> OFLP grant OFLP grant GoE and development partners funding REDD-relevant initiatives (such as SLMP, PSNP, AGP. Refer to Annex 10)
	Wood extraction for firewood and charcoal	<ul style="list-style-type: none"> Forest management investment, including afforestation and reforestation for biomass energy (woodlots). Coordination with the national cook stoves and the biogas programs to mitigate biomass demand (see below for incentives enhancements and policy). 	<ul style="list-style-type: none"> OFLP grant GoE
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. 	<ul style="list-style-type: none"> OFLP grant GoE land use planning initiative SLMP (MoA/BoA) DFID (LIFT)
	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 	<ul style="list-style-type: none"> OFLP grant GoE GoE and development partners funding REDD-relevant initiatives (such as SLMP, PSNP, AGP. Refer to Annex 10)

Figure 11-Strategy options for the Oromia Forested Landscape REDD+

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 below.

Figure 12-Strategic options and targeted measures in the draft national REDD+ strategy

Strategic Option categories	
Targeted sector based measures	Strategic actions <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)

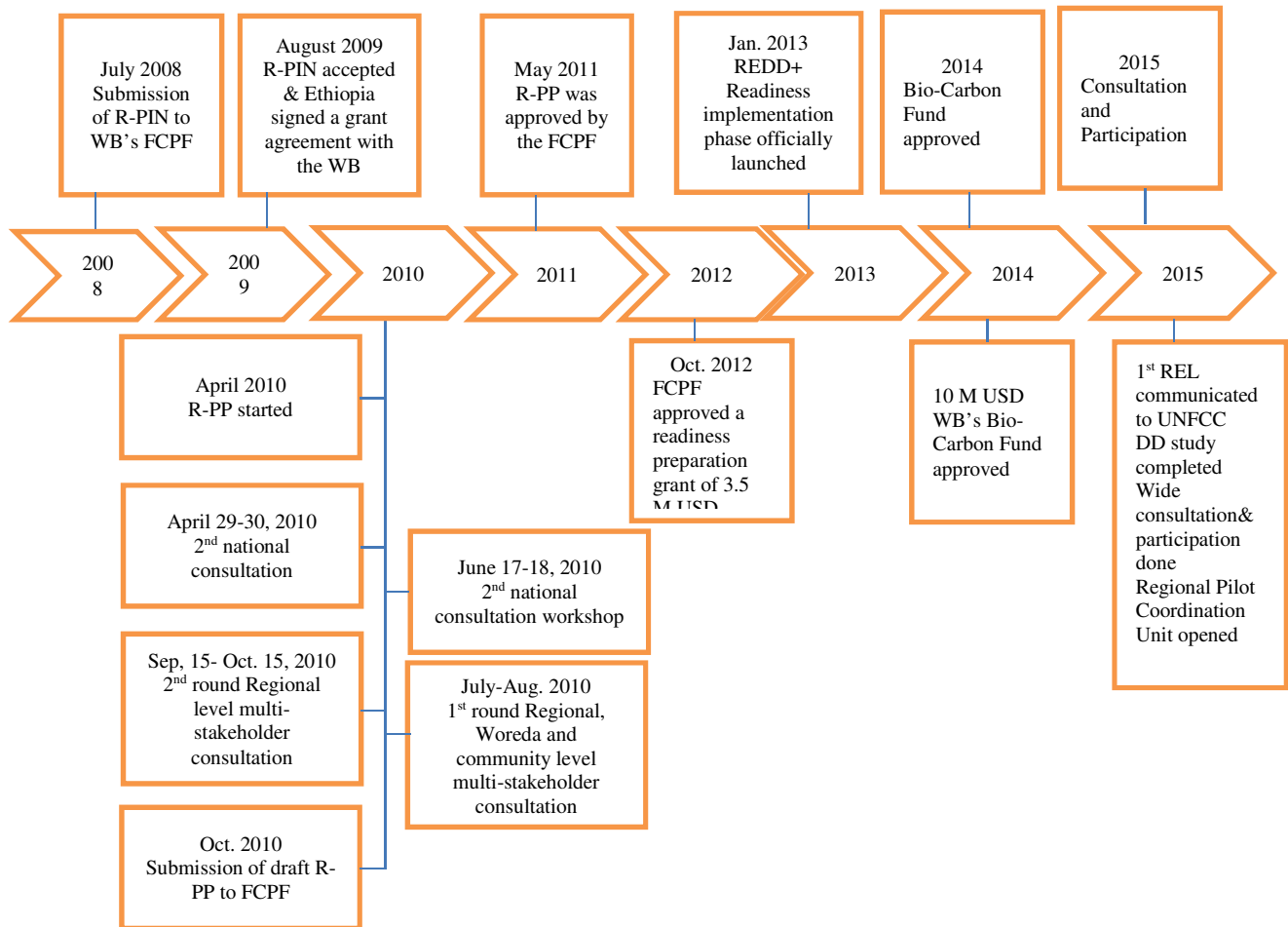
2.7 Overview of Ethiopia's REDD+ Readiness process under FCPF

Ethiopia is a participant of the World Bank's 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 United Kingdom (UK) through the World Bank's BioCarbon Fund. The FCPF of the World Bank serves as a financial trustee for 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 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 1 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.

Figure 13-Ethiopia's REDD+ Readiness Process under FCPF



2.8 REDD+ Management Arrangement

The Federal level REDD+ Management arrangement (see figure 2) is put in place and fully 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 ToR. 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.

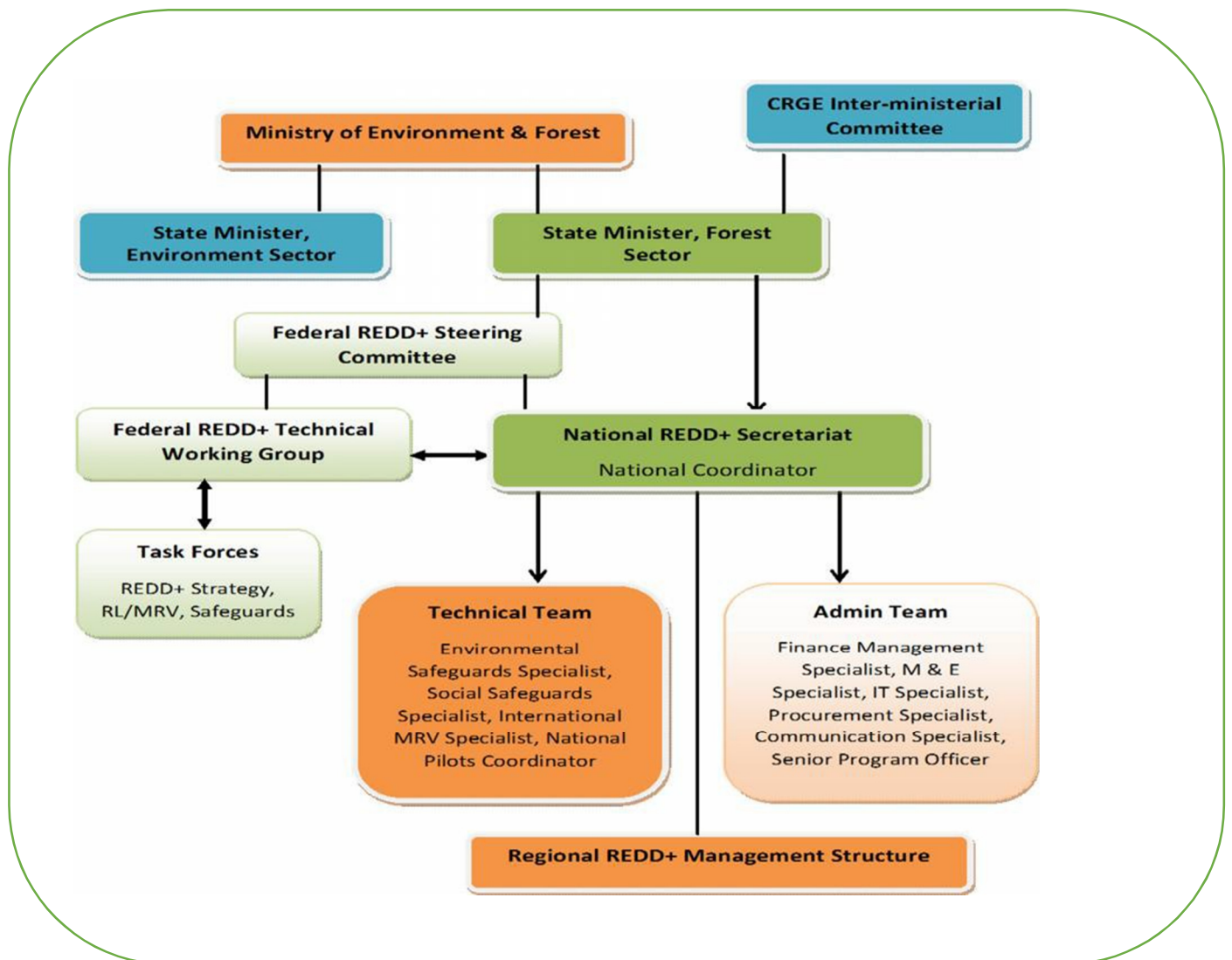


Figure 14-National REDD+ management arrangement

2.9 Consultation and 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 to complement the consultation and Participation platforms used in preparing the SESA, ESMF, RPF and PF to secure broad community support for the REDD+ Readiness and the OFLP. Further, the consultation and participation Plan will provide a framework that ensures ownership, transparency, and inclusiveness of relevant stakeholders in the implementation process of the R-PP. The consultation process at the national level will be guided by the Consultation and Participation Plan together with an 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 classify 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.

A national study on drivers of deforestation and forest degradation identified the drivers, (agents and causes) disaggregated spatially across Ethiopia and prioritized strategic options to address the identified drivers. This on-going SESA/ESMF study will produce four inter-related documents: Strategic Environmental and Social Assessment, Environmental and Social Management Framework, Resettlement Policy Framework and Process Framework. These four safeguard documents will 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.

2.10 National Forest Inventory, Reference Level and MRV system

Ethiopia is now designing and implementing a robust 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.

2.11 Situation of REDD+ Pilot 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).

Bale Mountain 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 forest 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 (CBOs), 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 (FPIC) approach on issues related to project design, project life time and benefit sharing among others. Since the Bale REDD+ Project is one of the six 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 Sustainable Forest Management with the Regional government. Promotion of improved stoves to ca. 24,000 community households estimated to save 90,000m³ wood in three 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, and 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.

Ethio-wetlands REDD+ Project: 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 include 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 strengthening OFWE** and community based organizations in Illubabor Zone in Oromia National Regional State, Ethiopia. The project area covers a total of 168,610 ha. Based on its feasibility study, average annual deforestation is estimated at 1.2% and the number of project beneficiaries are estimated to be 150,000 households. Moreover, the project is expected to generate a total of 16,637,271 tCO₂ over 20 years'.

Oromia Forested Landscape Program (OFLP)

OFLP will be Oromia Regional State's strategic programmatic umbrella and coordination platform for multi-sector, multi-partner intervention on all forested landscapes in Oromia. The longer term program will contribute to a transformation in how forested landscapes are managed in Oromia to deliver multiple benefits such as poverty reduction and resilient livelihoods, climate change mitigation, biodiversity conservation, and water provisioning. OFLP would foster equitable and sustainable low carbon development through a series of: (i) on-the-ground activities that address deforestation, reduce land-use based emissions and enhance forest carbon stocks; and (ii) state-wide and local enhancements to institutions, incentives, information, and safeguards management to upscale investment (enabling environment), including coordinating and leveraging multiple REDD-relevant interventions⁴ across the regional state.

⁴ REDD-relevant initiatives are projects, programs and activities in general promoted by GoE, donors, NGOs or private sector that directly or indirectly contribute to reducing emissions from deforestation or increasing forest carbon stocks in the Oromia Regional State. Examples of these initiatives, include, the Ministry of Agriculture's SLMP, JICA and OFWE's efforts to promote participatory forest management (PFM) and new forest-based business models (including forest coffee) and OFWE's planted forests.

OFLP would help enable GoE to strategically mobilize, coordinate and scale-up funding programmatically from several different sources. The success of OFLP and the achievement of the Government's broader forest, land-use, and climate ambitions depend on OFLP's ability to leverage financial resources from existing and future REDD-relevant initiatives such as PSNP, SLMP, AGP, private sector activities, the CRGE Facility, bilateral support, farmers' own investment, Germany's intended investment in Bale National Park through EWCA, and government budget. REDD-relevant initiatives also include REDD+ projects that are currently seeking carbon payments, which would be integrated (or 'nested,' as per the technical term) into OFLP, such as the Bale Mountains REDD+ project.

The OFLP will establish programmatic approach through two financial instruments that would be supported by two legal instruments that will be supported by two legal instruments: (i) the US\$ 18 million mobilization grant; and (ii) the US\$ 50 million Emissions Reductions Purchase Agreement (ERPA). These are detailed below:

- i. The 5-year mobilization grant will finance the establishment and initial implementation of the state-wide jurisdictional ER components of the Program.* The grant financing would support GoE to strengthen its state-level and local-level enabling environment and implement selected on-the-ground investment activities which would facilitate the achievement of ERs (and resulting ER payments) while also leveraging greater financial resources from multiple sources. The grant would in particular finance: (i) TA among all woredas across the state (such as landscape management coordination, land-use planning support, and safeguards management); and (ii) forest investment and livelihoods support in deforestation hotspots with high carbon content (49 woredas yet to be defined sites within).⁵
- ii. Emissions Reductions Payments of US\$ 50 million for verified carbon performance paid in a period of up to 10 years (2016-2026).* These payments would be available once the Program achieves, verifies and reports on results in terms of reduced emissions. The ER payments would be distributed according to a Benefit Sharing Mechanism (BSM) and used primarily to ensure the sustainability of the land-use interventions promoted to reduce deforestation (including activities in the agriculture, energy and forestry sectors), as well as to scale up the interventions to other geographical areas within Oromia. This climate financing would be channeled through an Emissions Reductions Purchase Agreement (ERPA) to be signed between GoE and WBG in 2016. The envelope for these payments could grow as OFLP becomes operational and generates results, and as other ER buyers show interest in OFLP.

The OFLP geographic boundary would be all forests in Oromia. The Program would monitor and account for positive and negative changes in forest cover and associated GHG emissions reduction from ER payments would be defined as per the BSM currently under preparation by the GoE. This scope is fully in line with the REDD+ "jurisdictional approach."

Monitoring forest cover and forest cover changes would follow methodologies that are being established at the national level, and in line with international best practices. The data generated by OFLP would feed into the national forest cover monitoring system and UNFCCC reporting more

⁵ These woredas were selected according to: (i) presence of high forest areas (given the high carbon stocks in these forests); (ii) large size deforested area and high rate of deforestation within these woredas; and (iii) contiguity

broadly. ER payments would be made upon third-party verification of carbon performance.

Program Components

OFLP would have three components. The US\$ 18 million mobilization grant would finance activities under two components over a 5-year period: (1) Enabling investments; and (2) Enabling environment. These funds would be channeled to GoE as a recipient executed (RE) grant. The third component would consist of US\$ 50 million of ER Payments for verified emissions reductions as they are delivered over longterm period (the components overlap in time).

Component 1: Enabling Investments (US\$ 11.55⁶ million RE grant, 5-year period): Component 1 will finance investment in participatory forest management (including livelihoods support and selected nature-based community enterprise development) and reforestation in deforestation hotspots, extension services, and land-use planning state-wide at state and local levels.

Component 2. Enabling Environment (US\$ 6.457 million RE grant, 5-year period): Component 2 will finance complementary activities to improve the effectiveness and impact of institutions, incentives (i.e., policies, marketing, BSM), information (i.e., strategic communications, MRV) and safeguards management at state and local levels. This component will enhance the enabling environment to help scale up and leverage action on the ground to reduce deforestation and forest degradation.

Component 3. Emissions Reductions (ER) Payments (US\$ 50 million ERPA, 10-year period): Unless specified differently in the ERPA, ER Payments will be made only for emission reductions achieved during the ERPA period. However, interventions conducive to emission reductions can start at any time. ER payments will be delivered once results are achieved, verified by a third party, and formally reported to the WBG. Based on the design of the MRV system, it is expected that reporting and verification of ERs can occur every two years. The ER payments will be managed by the FDRE and distributed to the beneficiaries according to the BSM to be prepared by the FDRE (see annex 6), which will aim to incentivize greater uptake of sustainable land-use actions. The BSM will need to be formally adopted by the FDRE before any ER payment can be made. In addition, it should be noted that the ER payments will not cover the full cost of implementing changes in landscape management. The ER payments will provide some return that offsets some of the costs of improving the landscape for the wider benefit of all.

Program Location and Salient Physical Characteristics Relevant to the Safeguard Analysis: The OFLP geographic boundary would be all forests in Oromia. The region is located between 3024'20"-10023'26" N latitudes and 34007'37"-42058'51" E longitudes. Oromia is Ethiopia's largest regional state in terms of land area (around 28.5 million hectares, roughly the size of Italy), population (over 30 million people) and forest cover⁸ (approximately 9 million ha in total⁹). The Program would monitor and account for positive and negative changes in forest cover and associated GHG emissions reduction within all 287 rural and semi-rural woredas the regional state boundaries of Oromia (i.e.,

⁶ Includes physical and price contingencies of 3.24 percent.

⁷ Ibid.

⁸ Calculated based on the Ethiopia's Forest Reference Emissions Level submitted to the UNFCCC (3rd version, December 2016, not publicly available yet)

⁹ The Forest Sector Management at MEFCC defines forests in Ethiopia as 'Land spanning at least 0.5 ha covered by trees (including bamboo) attaining a height of at least 2 m and a canopy cover of at least 20% or trees with the potential to reach these thresholds in situ in due course'. An updated map is expected from the Food and Agriculture Organization (FAO)/Ministry of Environment, Forest, and Climate Change (MEFCC).

the “accounting area of the Program”). However, specific sites to be financed by the grant under portion of OFLP are not yet known.

Based on the national forest definition, 284 of Oromia’s rural and semi-rural woredas include some forest. Most of Oromia’s high forest (moist montane forests) is found in the Bale forested landscape in the southeast and the Jimma/Wellega/Ilubabor forested landscape in the west. Bale serves as the water tower for the eastern drylands in the Somali region and the country of Somalia, drylands where mobile pastoralism is the predominant livelihood system and which is highly vulnerable to drought.

The forests in Oromia region provide critical ecosystem services to the country and to the region. It harbors globally important biodiversity with endangered endemic species such as the Abyssinian wolf and the mountain Nyla. Oromia’s western forest are home to endemic coffee (Coffee Arabica) that has high potential as a value-added export, and harbor wild varieties of the species. Important rivers also originate in or are affected by Oromia’s forests, including those flowing into the new Renaissance Dam under construction.

Forest loss and degradation are increasing in Oromia. Deforestation in Oromia has been particularly intense in western (in the Zones of West Wollega, Qeleme Wollega, Ilu Aba Bora) and eastern parts of the regional state (in the Zones of Bale and Guji). In Oromia as a whole, nearly 157,000 ha of forest was lost between 2000 and 2013, or around 12,000 hectares lost every year. This has resulted in over 46 million tons of CO₂ equivalent emitted into the atmosphere over this period, or around 3.5 million tons annually (calculated based on Hansen *et al*, 2013 and DetNorske Veritas, 2015).

OFLP would have positive role in reversing deforestation through activities described under Component 1 which include, among others, support to land-use planning; rehabilitation of forests through afforestation, reforestation, participatory forest management; and assisted natural regeneration. The state-wide activities under Component 2 would also have beneficial impacts through establishing and implementing the OFLP strategic framework. Sub-component 2.4 would, in particular, finance activities to enhance safeguards management at regional and local levels.

Figure 15-Description of REDD+ pilot projects and implementing organizations in Ethiopia

REDD+ initiative	Location	Scale	Size (ha)	Status	Proponent
Bale Mountains Eco-Region REDD+ Project	Oromia	Project level	500,000	Under validation	Oromia Forest & Wildlife Enterprise
Kaffa/Sheka Biosphere Reserve	SNNPR	Project level	>240,000	Initiated	Ethio-wetlands and Natural Resources Association
Yayu REDD+ Project	Oromia	Project level	190,000	Initiated	Environment and Coffee Forest Forum
Oromia Forested Landscape Program	Oromia	Jurisdictional	Approximately 8.7 million ha in total	Design phase completed	Oromia Forest & Wildlife Enterprise (a national pilot)

2.12 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 come.

3. Approach and Methodology

3.1. Approach

3.1.1 SESA process

The Terms of Reference (ToR) for the SESA study was prepared by the National REDD+ Secretariat. The ToR contains the background and purpose/objectives of the SESA project as provided in annex

1. The task encompasses the following five stages as shown in Figure 2:

1. Preparation for the SESA;
2. Scoping;
3. Identifying and Mapping of Stakeholders
4. Baseline data collection;
5. Report writing and submission.

The five stages of the SESA process have been followed in an iterative manner as deemed necessary

3.1.2 Preparation for the SESA

SESA/ESMF ToR was prepared by national REDD+ Secretariat. Expression of interest was announced in November 2013 to identify interested and relevant firms to participate in the bid process. In July 2014, invitation for proposal submission announced. The contract was awarded in February 2015 and an inception workshop was held on 27 February 2015. Negotiations and revisions on the terms of deliverables (e.g., Process Framework newly added; and inclusion of more study sites in Oromia) were agreed in February 2015.

3.1.3 Scoping

The stakeholder analysis and the inception process constitutes much of the work in the scoping phase. The scoping process establishes pertinent issues for subsequent detail assessment as an input for the SESA, identifies relevant criteria for assessment, and helps to precisely conduct stakeholder analysis/mapping. In order to identify the relevant stakeholders the SESA study team has prepared a checklist (Annex 2) and conducted interviews during this process.

Revision of SESA/ESMF Work Plan

Comments were given by the stakeholders during the inception workshop as well as by the client (MEF). During the inception workshop, the number of sample sites (Woredas) was proposed to increase from 16 to 26. Incorporating all the comments and the revised sample Woredas, the final inception report was submitted to the National REDD+ Secretariat in March 2015.

Team organization

SESA, ESMF, PF and RPF teams were organized with one key staff as principal investigator for each standalone report. Each team was in charge of developing data collection tools, its respective assignment and then cross-check the compatibility and coherence of the tools with checklist of other groups. The key staffs had provided training to field data enumerators and consultation experts.

Mobilization for field work

The SESA study team has mobilized five field teams on June 2, 2015. As part of the contract arrangement the field teams have been mobilized to the selected eight regions, 26 Woredas and 52 Kebeles in their respective localities. Each field team consists of three members that is comprised of one key staff and two experts that have adequate professional and work experiences in conducting consultation and collecting socio-economic data. A one day discussion on the contents of various data collection tools has been given to field crew members and pre- tests had been carried out.

3.1.4 Identifying and Mapping of Stakeholders

Stakeholder identification and mapping checklist was developed and distributed (annex 2) to different institutes including National REDD+ Secretariat to exhaustively capture stakeholders that are relevant and directly or indirectly take part in the REDD+ processes and its implementation.

3.1.5 Collecting and Analyzing Baseline Data

Based on understandings of the context, the team has started collecting and analyzing the baseline information that was necessary to identify the existing environmental and social issues related to REDD+ strategic options; policy and institutional gaps in relation to REDD+ process; and key stakeholders that are associated with these issues. This has been achieved by reviewing all previous studies carried out and collecting primary data from sources identified, including the study on the drivers of forest deforestation and forest degradation.

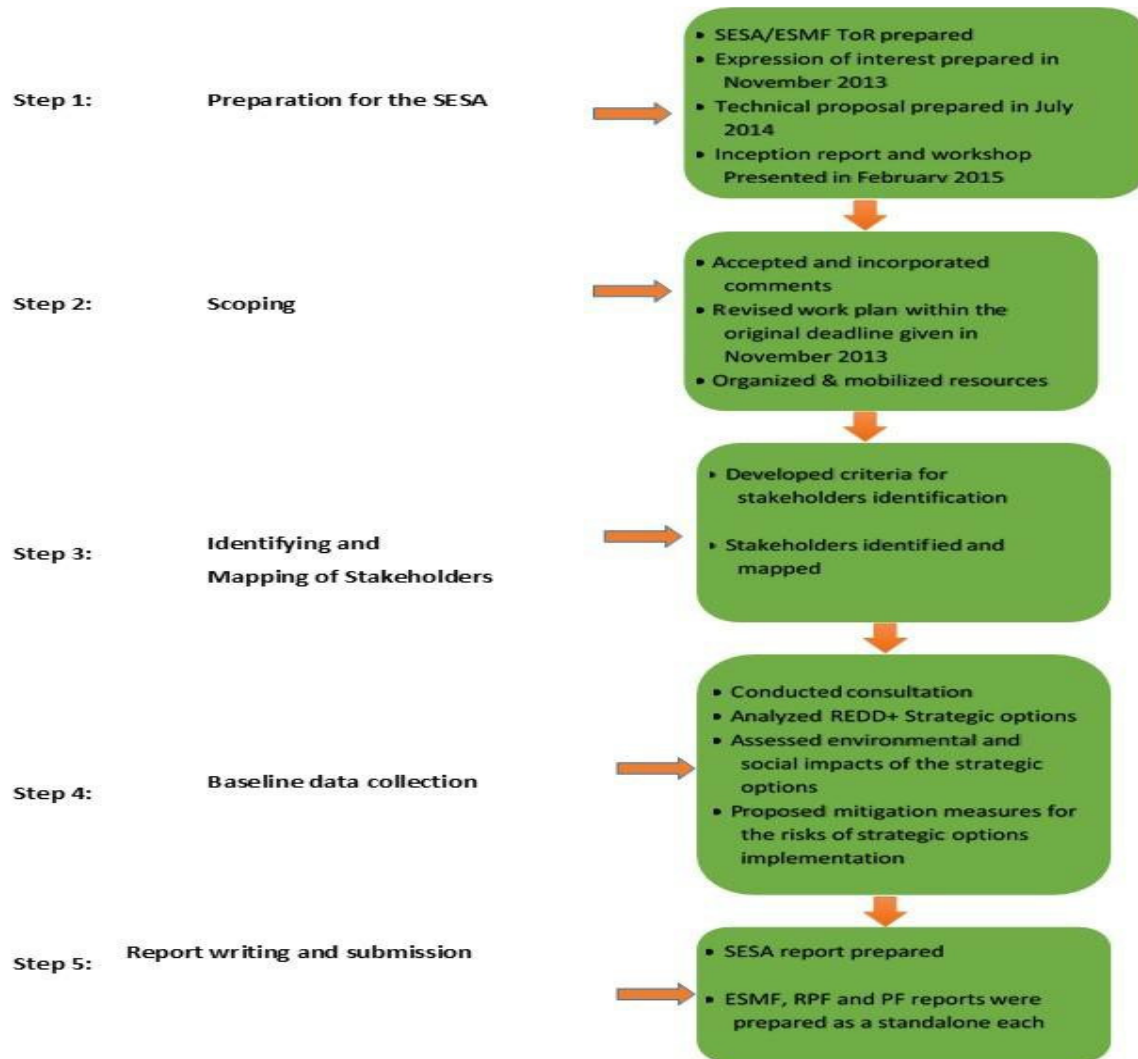


Figure 16-SESA Process Flowchart

3.2. Methodology

3.2.1 Secondary and Primary Data Collection Methods

Primary and secondary data were collected from review of pertinent literature, published and unpublished reports and strategic documents; and from interviews, discussions and observations in the selected study regions, Woredas and Kebeles. The following steps were followed in the data collection process.

- Secondary data review
- Deploying PRA
- Conducting workshops
- Spatial Analyses

3.2.2 Secondary data review

Secondary data pertinent to the assignments (global, national, regional and local), which included but not limited to the followings were reviewed, and analyzed.

Policy, Legal Frameworks and Other Relevant Documents Review

The following policy, legal frameworks and other relevant documents were revised.

- Constitution of The Federal Democratic Republic of Ethiopia (Proclamation No.1/1995)
- Environmental Policy of Ethiopia (EPE, 1997)
- Forest development, conservation and utilization policy and strategy (April, 2007)
- Forest development, conservation and utilization (Proclamation No542/2007)
- National Energy Policy of Ethiopia (2006)
- Development, conservation and utilization of wildlife (Proclamation No 541/2007)
- Environmental Impact Assessment (Proclamation No. 299/2002)
- Legislation on Expropriation of Landholdings for Public Purposes and Payment of Compensation (Proclamation No 455/2005)
- National Social Protection Policy, 2014
- The Rural Land Administration and Land Use Proclamation No. 456/2005
- Regulations on land Expropriated and payment of Compensation (Reg. No. 135/2007)
- The Rural Development Policy and Strategy (2001)
- Productive Safety Net Program and Sustainable Land Management
- Ethiopian Water Resources Management Policy (1999)
- Access to Genetic Resources and Community Knowledge, and Community Rights (Proclamation No. 482 /2006)

Relevant Natural resource related document reviewed

- Ethiopia's Climate Resilient Green Economy (CRGE, 2011)
- REDD+ Readiness preparation proposal (R-PP) (2011)
- Draft National REDD+ Strategy (2015)

World Bank safeguard policy triggered by the implementation of REDD+ Program

- World Bank Policy on Environmental Assessment (OP /BP 4.01)
- World Bank Policy on Natural Habitats (OP/BP 4.04)
- World Bank Policy on Pest Management (OP 4.09)
- World Bank Policy on Indigenous People (OP 4.10)
- World Bank Policy on Physical and Cultural Resources (OP/ BP 4.11)
- World Bank Policy on Involuntary Resettlement (OP/ BP 4.12)
- World Bank Policy on Forests (OP/ BP 4.36)
- OPN 11.03: Cultural Property
- World Bank Policy on Safety of Dams (OP/BP 4.37)

International Legalframework

- Cartagena Protocol
- Convention on Biological Diversity (CBD)
- Convention on International trade in endangered species of wild fauna and flora
- Convention on Economic, Cultural and Social rights (UNESCO)
- United Nations Convention to Combat Desertification (UNCCD)
- United Nations Framework Conventions for Climate Change (UNFCCC)
- Convention for the safeguards of intangible heritage
- Pan African Agency for the Great Green Wall (PAGWW)

3.2.3 Primary Data Collection

Deploying PRA

Different PRA tools (Table 3), such as consultation, focus group discussion and key informant interview have been used to generate primary data. The PRA tools were administered at different levels (i.e. from Kebele to national levels) including but not limited to community, government institutions, local and international nongovernmental organizations, academia and research institutions, private sector, civil society, activist groups and development partners.

Community consultation 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.

National, Regional and Woreda level consultation were held to get views on environment and social impacts of proposed strategic options to reduce deforestation and forest degradation as well as the legal frameworks of REDD+ such as benefit sharing mechanisms, conflict resolution forest resource use right, carbon right and land use planning. Stakeholders from different institutions and civil society at different levels were involved in consultations at National, Regional and Woreda levels.

Participants for consultation at national and regional levels had been drawn from a wide range of stakeholders such as representatives of government organization, major ministries (Agriculture, Environment and Forestry, Energy).

For consultations that were carried out at Woreda and Kebele or Community level, depending on the social context of the consultation area, participants had been drawn from representatives of existing ethnic groups, clan groups, social statuses, religious groups, gender groups, age groups, educational groups and, and any other walks of life that the facilitator encountered in the course of consultation and for sought its relevance. Separate consultation had been carried out with social, status, age and gender groups thinking of that opinions would be suppressed in mixed group discussion that may emanate.

Interviews at Household level with local and underserved community were conducted in all selected Kebeles. Selection of Kebele level interviewees had mainly included forest dependent community, women headed households and elders who involve in conflict resolution that arises from forest resource utilization. This method was employed to capture information from people who couldn't express themselves in group discussion settings as well as to capture data which could not be disclosed in focus group discussion.

Local forest users associations such as PFM, JFM, and others have also got due attention in the assessment process. In the selection of the forest user communities, care had been taken to sample communities with/without piloted REDD+ projects in order to obtain balanced views. The R-PP served as useful guiding document in this regard.

Figure17-PRA tools used, the levels at which the tools used and the stakeholders addressed by the particular PRA tools

Level	Data collection techniques				
	Consul tation	Focus Group Discussion	Key Informant Interview	Household Interview	Others
National	√		√		
Regional	√		√		
Woreda	√		√		Baseline Data
Kebele		√	√	√	
Site Observation					52 forest sites visited

Consultations were conducted at national, regional and Woreda levels. Participants included key stakeholders from government and non-government organizations. At Woreda level, stakeholders from government and community based organizations, ethnic or clan groups, community elders, youth associations, and gender groups were involved.

3.2.4 Criteria for Sample Sites Selection

Sample sites for the preparation of the reports on SESA, ESMF, PF and RPF are selected based on the following criteria:

Figure 18-Criteria set to select sample sites for SESA-ESMF-RPF-PF studies

Criteria code	Proposed Criteria
A	Deforestation & Forest Degradation (Hotspot points identified by Deforestation & forest degradation study team)
B	Forest cover-Woreda with the maximum forest cover
C	REDD+ project implementation potential
D	Forest vegetation type
	D1: High forest
	D2: Woodland
	D3: Bamboo forest
	Socio economic setting
E	E1: Sites with community based institutions engaged on forest activities (PFM, NTFP)
	E2: Ethnic groups diversity
	E3: Cultural practices & diversity
	E4: Forest dependent community living within and/or around the forest
F	Plantation Sites to see risks of afforestation /reforestation
G	Regional Administration
H	Leakage

3.2.5 Hot-spot for Deforestation and Forest Degradation

SESA-ESMF used the outputs from the study of the underlying causes of deforestation and forest degradations. The hot spots for deforestation and forest degradation in Ethiopia were identified in several studies (MEF 2015; SOS Sahel Ethiopia and Farm Africa 2015). Other than using hot spot areas (high deforestation and forest degradation areas) as SESA sample sites selections, the following criteria described in the subsequent sub-sections were also used.

3.2.6 REDD+ Projects Implementation Potential

Lands that have forest and/or could support forest growth and have potential for the implementation of REDD+ were considered in the samples. The potential of these sites considered in the samples for carbon stock can be attained through enrichment plantation, reforestation- afforestation scheme, assisted natural regeneration and rehabilitation of the existing forest.

Potential Natural Vegetation of Wereda, Ethiopia

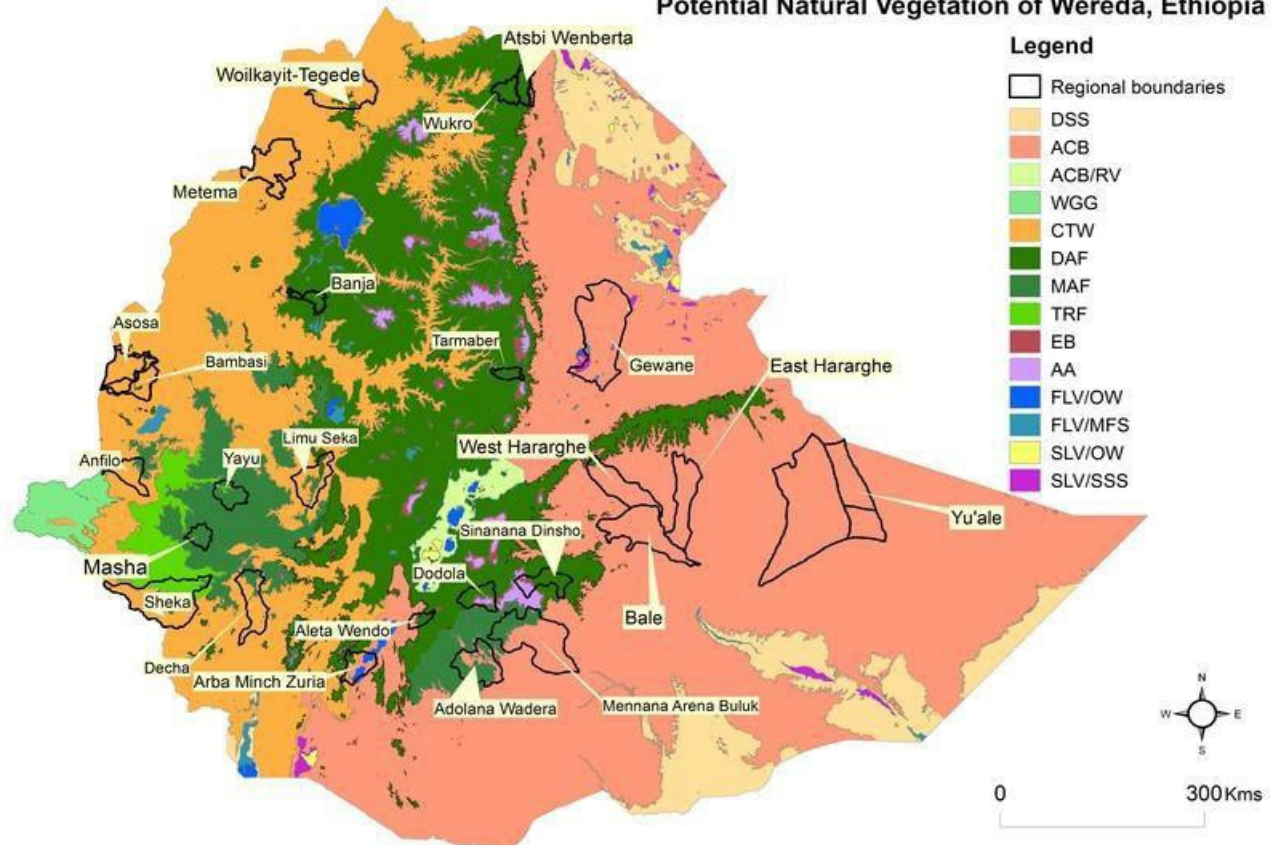


Figure 19-REDD+ Projects Implementation Potential Sites

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

3.2.6.1 Leakage

Forest lands found adjacent to areas where REDD+ project is implemented may become prone to leakage. Leakage creates environmental risk in terms of forest degradation and biodiversity loss.

3.2.6.2 Forest Cover

Woreda with high forest covers and Kebele within the Woreda having high potential for the implementation of REDD+ project was used as a criteria for selecting of the sample sites.

3.2.6.3 Forest Types (diversity)

Forest types that include high forests (Dry Evergreen Montane and Moist/humid Evergreen Montane Forests), woodlands (*Acacia-Comiphora* and *Combretum-Terminalia*) and bamboo forests are included in the sample sites.

3.2.6.4 Socio-economic settings

Those communities who, in one way or another depend on forests to support their economy, exercise their cultural practices, social and spiritual values, have also been considered for the sample sites selection. These segment of communities include pastoralists, agro-pastoralists and sedentary agriculture practitioners with their respective diversity of ethnicity, cultural practices, and institutional setups (CBOs and religious institutes). Social groups, those who are underserved and vulnerable (e.g., women, elders, people with disability); and the youth were proportionally represented in the various focus group discussions, key informant and household interviews.

3.2.6.5 Plantation sites

In different regions of the country, forest plantations through afforestation, reforestation and forest restoration are undertaken regularly as routine activities by the relevant sector offices, local communities and civil society organizations, to protect land degradation, rehabilitate catchments, improve the micro-climate and fuel wood supply on top of the efforts to enhance the forest stock in the country.

Such plantation forests may have potential social and environmental risk that need to be assessed for the REDD+ implementation. The REDD+ Secretariat, during the inception meeting held on 23 Feb 2015 with stakeholders, both the client and the consultants emphasized the need to include sample sites from the plantation forest sites. Accordingly, Koso-Ber (Plantation Forest in Awi Zone) of the Amhara Regional State was selected and included as a sample in the survey. The Amhara Region is selected in this regard, because the region is known for a considerable plantation forest than the other regions, for it has established 'Forest Enterprise' merely on existing plantation forests and due to the potential for afforestation and reforestation.

3.2.6.6 Regional States

There was a need to strike a balance between the different regions of the country with regard to the REDD+ project implementation and equity with respect to their resource utilization. Maintenance of diversity of the regions and fair utilization of resources has to do with the carbon funds and a priority that needs to be considered. Therefore, all National Regional States with a potential for the REDD+ program implementation were included and this is one of the selection criteria for the study sites. Additional numbers of study sample sites were also considered in Oromia due to the existence of large area of high forest and the pilot REDD+ regional initiative that is under preparation in the region.

3.2.6.7 Samples sites

Twenty six Woredas from 8 Regional States of the country with 2 Kebeles from each Woreda, which makes a total of 52 Kebeles nationwide, were included in the study. The selection of the sample Woredas was made by considering the representatives of all forest types of the country, the social and cultural diversity of the forest communities with respect to their forest management and utilization practices. The combination of the specific criteria used for the selection of the sample Woredas are shown in Table 6.

Figure20-Selected Woreda and Selection criteria

Regional States	Zone	Woreda	Selection Criteria
Afar	Zone-3	Gewane	A,B,C,D2,E1,E2,E3, E4,G
Amhara	North Shewa	Tarmaber/Debre-Sina	A,B,C,D1,E1,E2,E3, E4,G
	Gonder	Metemma	A,B,C,D2,E1,E2,E3, E4,G
	Awi	Banja-Shikudad/Kosober	B,C,E2,F, E4,G,H
BSG	Assosa	Asosa	A,B,C,D2,D3,E1,E2,E3, E4,G
		Bambasi	A,B,C,D2,D3,E1,E2,E3, E4,G
Gambela	Anuak	Abobo	A,B,C,D1,D2,E1,E2,E3, E4,G
	Mezenger	Godere	A,B,C,D1,E1,E2,E3, E4,G
Oromia	Bale	Harena Bulk	A,B,C,D1,E1,E2,E3, E4,G
		Dinsho (BMNP)	A,B,C,D1,E1,E2,E3, E4,G
	West Arsi	Dodola	A,B,C,D1,E1,E2,E3, E4,G
	Jima	Gera	A,B,C,D1,E1,E2,E3, E4,G
	Illubabor	Yayu	A,B,C,D1,E1,E2,E3, E4,G
		Didu	A,B,C,D1,E1,E2,E3, E4,G
	Kelem Wollega	Anfillo	A,B,C,D1,E1,E2,E3, E4,G
	Guji	Odo Shakiso	A,B,C,D1,E1,E2,E3, E4,G,H
	West Shewa	Jibat	A,B,C,D1,E1,E2,E3, E4,G
West Hararghe	Anchar	A,B,C,D2,E1,E2,E3, E4,G	
Somali	Jarar	Yoo'ale	A,B,C,D2,E1,E2,E3, E4,G
SNNPR	Gamo-Gofa	Arba Minch Zuria	A,B,C,D2,E1,E2,E3, E4,G
	Kafa	Decha	A,B,C,D1,E1,E2,E3, E4,G
	Bench-Maji	Sheko	A,B,C,D1,E1,E2,E3, E4,G

	Sidama	Wendo Genet	A,B,C,D1,E1,E2,E3, E4,G
	Sheka	Masha	A,B,C,D1,D3,E1,E2,E3, E4,G
Tigray	Misraqawi	Atsbi Wemberta	A,B,C,D1,D2,E1,E2,E3, E4,G
	Mierabawi	Wolkayit-Tegede	A,B,C,D1,E1,E2,E3, E4,G

4. Ethiopia Baseline Situation

4.1. Population Profile

Despite Ethiopia's long history, there were no estimates of its total population prior to the 1930s. The first population and housing census was conducted in 1984, a second census was conducted in 1994, a third in 2007 and based on the census projections estimates were realized every year on July. The population has increased steadily over the last three decades, from 42.6 million in 1984 to 53.5 million in 1994; 73.8 million in 2007; 86.6 million in 2013 and 96.6 million in 2014. There were slight declines in the population growth rates over these periods, from 3.1 percent per annum in 1984 to 2.9 percent in 1994 and 2.6% in 2007, 2.6% in 2013, 2.6% in 2014.

Ethiopia is one of the least urbanized countries in the world; only 17% of the population lives in urban areas while the balance 83% live in rural areas (CSA, 2014). Here urban areas refer to all capital of regions, zones and Woredas, and it also includes localities with urban Kebeles whose inhabitants are primarily engaged in non-agricultural activities.

The majority of the population lives in the highland areas. The main occupation of the settled rural population is farming, while the lowland areas are mostly inhabited by pastoral people, who depend mainly on livestock production and move from place to place in search of grass and water. More than 80% of the country's total population lives in the regional states of Oromia, Amhara and SNNP.

The population which is growing at a very rapid rate, of about 2.6% annually, has been clearing forests and vegetation to satisfy its increasing requirements of food and energy. As population grows, arable land per capita declines and the fragmentation and degradation of land through overuse increases. In response to the increased population density and shortage of arable land, fallowing practices which were traditionally used by farmers to maintain land fertility have also been either abandoned or the periods shorten.

Rural population constitutes about 83% of the total population and is mainly dependent on farming (CSA, 2014). So land is the most important source for food (agriculture), building materials and domestic energy (forests).

According to UNHCR, the total number of refugees in Ethiopia has reached 570,000 refugees as of the end of May 2014, making Ethiopia the second largest refugee host nation in Africa after Kenya. The main refugee populations in Ethiopia are from Somalia (42.6%), followed by South Sudan (32%), Eritrea (16.8%), and Sudan (7%). The increasing number of refugees in the country is largely the effect of the current influx of South Sudanese refugees to Gambella Region.

Since many of the refugee camps are located in the peripheries where the remaining forests in the country exist, the refugees are causing a devastating effect as field reports indicated the cases from Gambela and Benishangul-Gumuz regional states. The refugees not only clear forests for settlement but also depend on them for house construction and fuel wood.

4.2. Social Profile

Ethiopia is not only known for variations in the natural settings that extend from the highlands in the center to the low lands in the peripheries but also for its socio-cultural variations. The country as the nation state is comprised of 86 ethnic groups who have their own distinct languages and socio-cultural structures. These different socio-cultural structures and indigenous social and religious institutions molded the way each group use, protect and manage the natural resources such as forests and forest resources. On the other hand, the largest portion of the Ethiopian population lives in the rural areas depending on cultivation, agro-pastoralism, pastoralism and hunting-gathering combined with fishing as economic activities.

4.3. Social Profile of Oromia

Ethiopia has achieved substantial progress in economic, social and human development over the past decade, achieving rapid and inclusive economic growth averaging 10.9 percent since 2004. Extreme poverty fell from 56 percent in 2000 (one of the highest levels internationally) to 31 percent in 2011. Low levels of inequality have been maintained through this period. Non-monetary dimensions of well-being also show strong improvement. Life expectancy, for instance, increased by one year every year over this period, from 52 to 63 years. Meanwhile, the 2014 population of 95 million people (WBG, 2013) will grow to at least 120 million by 2030.

1. Demography

Based on the 2013 Central Statistics Authority population projection, the population of Ethiopia has reached 45, 249,998 male and 44,826,014 female and a total of 90, 076, 012 in 2015. Likewise, the population of Oromia based on the same projection reached 33,691,991 in 2015. The demographic figures show almost a 50:50 ratio of men and women dominated by more than 50% young and dynamic population group (CSA, 2013, BoFED, 2013). Oromia is home for more than 88% of the ethnic Oromo. Whereas, twelve percent of the population of Oromia belongs to the different ethnic groups (Amhara, Hadiya, Sidama, etc). More than 87% of the people of Oromia live in rural areas while 13% reside in urban areas (CSA, 2007). Exploring the 200710 census, religious wise about 48% of the people residing in Oromia follow Islam, 30% Orthodox Christian, 18% Protestant, three percent Traditional, half percent Catholic, one percent others respectively.

2. OFLP Program Beneficiaries

In line with the REDD+ jurisdictional approach that defines the carbon accounting area, OFLP would cover all of Oromia's 287 rural and semi-rural woredas¹¹. In these woredas, there are approximately 1.8 million people living inside or immediately adjacent to existing forests. A subset of this population, as well as officials in relevant institutions at all levels of government, would receive training or operational support under the grant. The direct beneficiaries are small holders, communities and officials in relevant institutions at all levels of government, who will benefit from capacity building and training in A/R, Participatory Forest Management (PFM), land use planning, safeguards, policy development, and extension activities. The number of these direct beneficiaries is 25,000 (30 percent

¹⁰ This is the latest data with breakdowns on the religious composition of the population of Oromia.

¹¹ Ethiopia Mapping Agency (EMA). 2013 Land Cover Map and Population Data. Central Statistical Agency (CSA), 2014

female), most of whom are located in 49 woredas with deforestation hotspots. However, work on the enabling environment will be carried out state-wide and the number of direct beneficiaries includes those benefitting from training and other non-investment support provided by the grant.

In addition, ER payments will also directly benefit communities and the government according to the rules set out in the Benefit Sharing Mechanism (BSM) that is to be prepared. ER payments will promote sustainable land-use practices. The exact number of direct beneficiaries of ER payments will be evaluated ex post, once the BSM is in place. Moreover, these benefits will only materialize when emissions from forest change are reduced in Oromia.

The direct benefits include goods, services, small works, and training that will: (a) improve forest management and empower communities to participate; (b) create opportunities for jobs, casual labor, and livelihoods from forests; (c) improve capacities and policies to better manage landscapes for multiple benefits; and (d) help secure ecosystem services such as more usable water for crops and households, resilience from intact biodiversity, and more shade for livestock. A large additional population in Ethiopia and her neighbors will indirectly benefit from natural asset protection downstream, including by reduced soil erosion, flood risk, and sedimentation in water bodies for hydropower, fishing, irrigation, and water supply.

3. OFLP Geographic Location: Physical Characteristics

The OFLP geographic boundary would be all forests in Oromia. The region is located between 3024'20"-10023'26" N latitudes and 34007'37"-42058'51" E longitudes. Oromia is Ethiopia's largest regional state in terms of land area (around 28.5 million hectares, roughly the size of Italy), population (over 30 million people) and forest cover (approximately 9 million ha in total spread over rural areas of Oromia).¹²

Based on the national forest definition¹³, 284 of Oromia's rural and semi-rural woredas include some forest. Most of Oromia's high forest (moist montane forests) is found in the Bale forested landscape in the southeast and the Jimma/Wellega/Ilubabor forested landscape in the west. Bale serves as the water tower for the eastern drylands in the Somali region and the country of Somalia, drylands where mobile pastoralism is the predominant livelihood system and which is highly vulnerable to drought.

4. Forest Resource Base

Gebremarkos Wolde Selassie (1998) based on historical evidences indicated that "historical evidences revealed that a few hundred years ago more than 63% of the total land mass of Ethiopia was covered by dense forests but it is not greater than 3% now." However, high and extended rate of deforestation and forest degradation coupled with rapid population growth, brought the forest cover that was estimated to be 40% in 1900 to 16% in 1954, 8% in 1961, 4% in 1975, 3.2% in 1980 (Amogne Asfaw 2014). However, recent unpublished reports claim that the Ethiopian forest cover has reached about 15%. (Table 13 and Figure 18).

Figure 21-forest cover of Ethiopia over years

¹² This data was calculated using the 2013 map prepared by the Ethiopia Mapping Agency (data unpublished, 2015).

¹³ Forests in Ethiopia are defined as land with a minimum of 20% canopy cover, with trees at least 2m high and a minimum size of 0.5 hectares. An updated map is expected from FAO/MEF in September 2015

Year	Forest cover (%)	Population (in ' 000')
1900	40	11,901
1954 ^A	16	17,634
1961	8	21,162
1975	4	27,465
1980 ^A	3.6	38,749
1998 ^B	2.7	61,226
2015 ^C	15	106,312

Sources for Forest Data: ^AMillion Bekle (2001); ^B Reusing (1998); ^C MEF (unpublished), Source for Population: Jan Lahmeyer, 2004

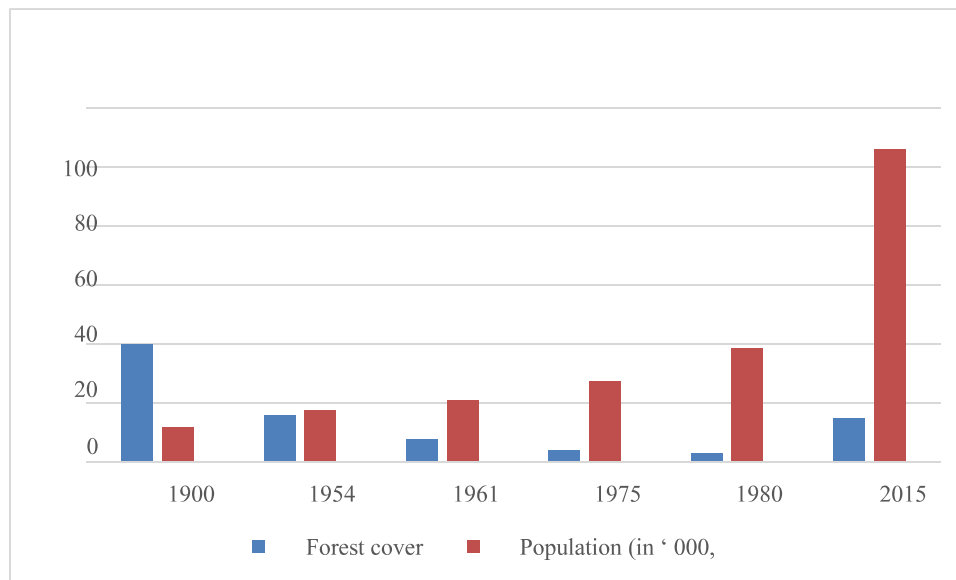


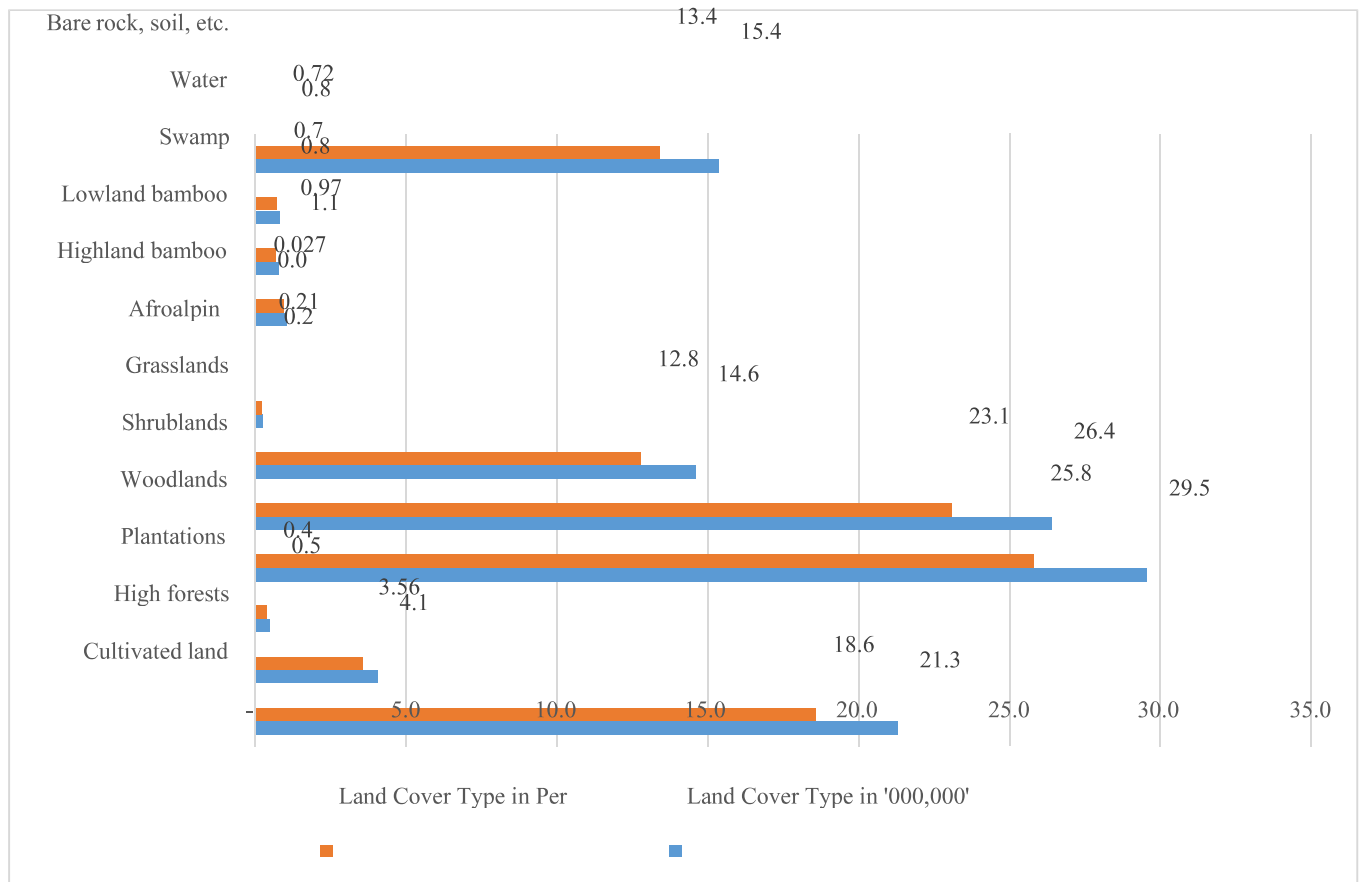
Figure 22-Forest Cover Change vs Population Growth of Ethiopia

Varying figures have been produced by many foresters on the extent of coverage of the Ethiopian forest resources. The debate has gone on for decades until the Ethiopian Mapping Agency has recently indicated (but not published) that the estimated forest coverage of the country to reach to 15%. The extent and forest types have been reviewed by Yitebitu Moges et al. (2010) which has similar projection as the Ethiopian Mapping Agency's 2015 results. They had also indicated that Ethiopia's forest resources supply most of the wood products used within the country, as well as a large volume of diverse non-timber forest products (NTFPs), besides their ecological functions. Several authors and national or sub-national inventory projects have carried out assessments and documented the extent of forest resources and other land uses of Ethiopia. Among these, the following are worth mentioning: Chaffey (1982), LUPRD-MOA/FAO (1985), and the World Bank- funded Woody Biomass Inventory and Strategic Planning Project (WBISPP) (2005) has reviewed these various reports.

A key source of information on forests and other land uses in Ethiopia is WBISPP. WBISPP (2005) classified the land cover types in Ethiopia into 9 major types (Table 2). In the recent Forest Proclamation No. 542/2007, high forests, woodlands, bamboo forests are recognized as forests. Based on WBISPP, the land use/land cover statistics in Ethiopia indicates that woody vegetation including high forests cover over 50% of the land (WBISPP, 2005). The definition of forest is ambiguous in the IPCC Good practices

Guideline. Following the definition of FAO (2001) the vegetation of Ethiopia that may qualify as 'forests' are natural high forests, woodlands, plantations and bamboo forests, with an estimated area of 35.13 million ha. If the shrub lands are added to this (considering the definition of IPCC for forest), the estimated cover is over 50% (61.62 million ha). The next largest land use type is cultivated land with 18.6% cover.

The land-cover types of Ethiopia and their magnitude/proportion (WBISPP, 2005)



(Source: WBISPP, 2005)

Figure 23-The land-cover types of Ethiopia and their magnitude/proportion

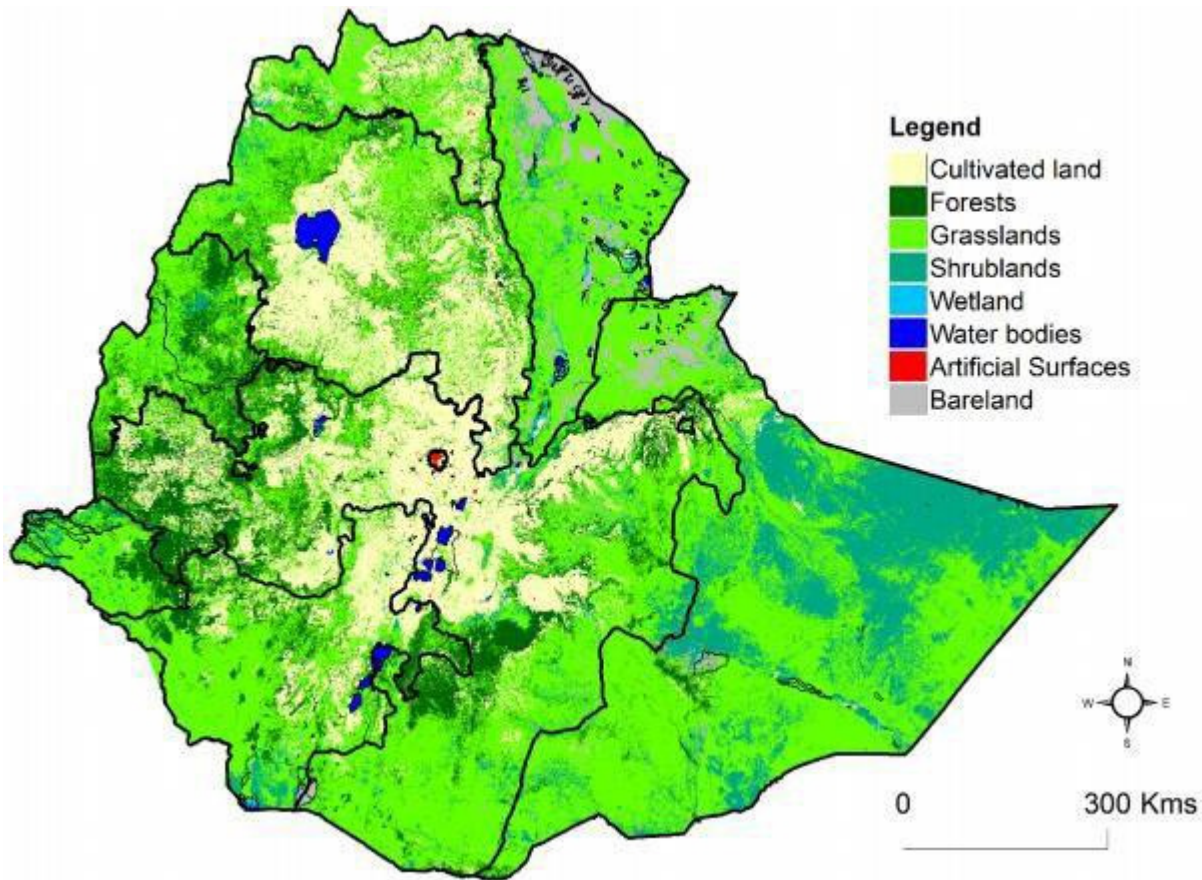


Figure 24-LCLU Map of Ethiopia

(Source: Chen et.al. 2015).

On the other hand, the recent data on forest resources of Ethiopia reported in FAO (2010) puts Ethiopia among countries with forest cover of 10-30%. According to this report, Ethiopia's forest cover (FAO definition) is 12.2 million ha (11%), clearly underestimated compared to the IPCC definition. It further indicated that the forest cover shows a decline from 15.11 million ha in 1990 to 12.2 million ha in 2010, during which 2.65% of the forest cover was deforested. The cover belonging to other wooded land remained constant in the same period. The FAO (2010) FRA data is based on a reclassification, calibration and linear extrapolation of data from WBISPP 2004.

Disaggregated by region, the land use land change analysis conducted by the Ethiopian Mapping Agency (EMA) showed that the forest cover in most of the regions has increased except in the Afar regional state in the period between 2003 and 2008. According to this analysis, currently the highest forest cover in the country is found in Oromia region, covering about 65 % (Table 8). In the entire country, much of the forest increase was due to conversion of grasslands and croplands into forest lands. A total of about 5.5 million ha of grassland and about 2.4 million ha of cropland has been changed into forest land between 2003 and 2008. During the same period, the dynamics shows that a total of about 3.3 million ha of forest land was changed into grassland and another 1.9 million ha of forest land was changed into cropland.

5. Spatial Distribution of the Forest Vegetation Resources of the Country

The Major Vegetation Types

The vegetation types in Ethiopia is shown in the Potential Vegetation Map of Ethiopia (Friis *et al.* 2011) that recognizes 12 major vegetation types and three subtypes. These include: 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 an pan vegetation.

Of these vegetation types, the following include “forests”, 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, and the Riverine vegetation. A brief description is given below.

i. *Acacia-Commiphora* Woodland and Bushland

This vegetation type is characterized by drought resistant trees and shrubs occurring between 400 and 1800 m. This vegetation type occurs in the northern, eastern, central and southern part of the country.

The trees and shrubs form an almost complete stratum and characteristic species include species of *Acacia*, *Balanites*, *Commiphora*. Most of the National Parks in the country are found in this ecosystem. Of these parks, only the Awash National Park is gazetted. All the other conservation areas (Abijata-Shala Lakes, Nechisar, Omo, Mago, Yangudirassa NPs attempt to function without proper legal recognition).

Threats: The *Acacia-Commiphora* woodland is currently under strong environmental stress. Extraction of fuel wood and charcoal has increased the rate of deforestation and natural resource depletion.

Clearance for rain-fed agriculture and irrigation under takings further enhanced its vulnerability. Over 40 taxa are threatened in this ecosystem. The failure to manage the expansion of exotic invasive species, such as *Prosopis juliflora* is threatening the biodiversity.

ii. Dry Evergreen Afro-montane Forest and Grassland Complex

This vegetation type represents a complex system of successions involving extensive grasslands rich in legumes, shrubs and small to large-sized trees to closed forest with a canopy of several strata occurring between (1800-) 1900 and 3000 m. This vegetation type covers much of highland areas and mountainous chains of Ethiopia in Oromia, Amhara, Tigray and Southern Nations Nationalities and Peoples (SNNP) regions.

The areas with Dry Evergreen Afromontane forest have canopies usually dominated by *Podocarpus falcatus* with *Juniperus procera* as co-dominant, followed by *Olea europaea* subsp. *cuspidata*, etc. The areas with Afromontane woodland, wooded grassland and grassland include the natural woodlands and wooded grasslands of the plateau with *Acacia abyssinica*, *A. negrii*, *A. pilispina*, *A. bavazanoi*, *A. montigena*, etc.

The grasslands occur in the areas where human activity has been largest and most intense, and found at altitudes between 1500 and 3000 m. The montane grassland in most places derive from forest and other woody vegetation types. The evergreen scrub vegetation occurs in the highlands of Ethiopia either as an intact scrub in association with the dry evergreen montane forest or usually as secondary growth after deforestation of the dry evergreen montane forest.

Threats: In general, the Dry Evergreen Afromontane Forest and grassland complex is inhabited by the majority of the Ethiopian population and represents a zone of sedentary cereal-based mixed agriculture for centuries. The forests have diminished due to human interference and replaced by bushlands in most areas. This forest is under severe pressure as a consequence of inhabitants' need for agricultural and grazing land. There is a severe and increasing fuel wood gap in the country, which leads to depletion of standing stock and, hence, further degradation of the remaining forest stands. This is also an ecosystem where livestock density is one of the highest in the country thus exacerbating the degradation process.

ii. Moist Evergreen Afromontane Forest

This vegetation type is in most cases characterized by one or more closed strata of evergreen trees, which may reach a height of 30 to 40 m. These forests occur in the South-Western part of the Ethiopian Highlands at between 1500 and 2600 m elevation and the Harena Forest on the southern slopes of the Bale Mountains. The forests characteristically contain a mixture of *Podocarpus falcatus* and broad-leaved species as emergent trees in the canopy including *Pouteria adolfi-friederici*. There are also a number of medium-sized trees, and large shrubs. A number of the High Priority forests recognized are included in this vegetation type. **Threats:** Expanding agricultural expansion in this vegetation type.

iii. Transitional Rain Forest

The Transitional Rainforest, from the western escarpment of the Ethiopian Highlands, in western Ethiopia (Wellega, Illubabor and Kefa). It occurs between 500 and 1500 m elevation. The characteristic species in the canopy includes *Pouteria (Aningeria) altissima*, *Anthocleista schweinfurthii*. **Threats:** Expanding agricultural expansion in this vegetation type.

iv. Ericaceous Belt

This vegetation type includes Areas between 3000-3200 m a.s.l. below the Afro-alpine vegetation. The vegetation type is characterised by the dominant species of *Erica arborea*, *E. trimera*, *Hypericum revolutum*, *Myrsine melanophloeos*. This vegetation type is sometimes considered as a sub-afroalpine vegetation type.

v. Afro-alpine vegetation

This vegetation type includes areas between 3500 m and 4620 m. The vegetation type is characterised by the most conspicuous giant Lobelia, *Lobelia rhynchopetalum*, and evergreen shrubs including the heather, *Erica arborea* and perennial herbs such as *Helichrysum* species.

Ethiopia has the largest extent of afroalpine and subafroalpine habitats in Africa. These

environments are highly fragile due to the extreme climatic conditions (low temperature, harmful short wave radiation, etc.).

Threats: Because of the increasing population pressure there are frequent encroachments by man that result in widespread destruction of wildlife and their habitats. As a result of intensive human pressure most of the faunal and floral resources are now at risk. Apart from the Semien and Bale Mountains, most of the afroalpine and subafroalpine vegetation type are not as such protected.

vii. Riverine vegetation

The riverine vegetation is recognized below 1500 m. It is highly variable in structure and density, and species composition depending on altitude and the geographic location. Common species in this vegetation type include *Salix subserrata*, *Trichilia emetica*, *Diospyros mespiliformis*, *Syzygium guineense*, *Tamarindus indica*, *Phoenix reclinata*, *Hyphaene thebaica*, etc.

Traditionally what is considered as high forests include the Dry Evergreen Afromontane Forest and grassland complex, the Moist Afromontane Forest) and is described below.

The Bamboo forests are also described as a separate forest types are also described separately. But in reality, the highland bamboo forest dominated by *Arundinaria alpina* is part of the Afromontane rainforests and the lowland bamboo dominated by *Oxythenanthera abyssinica* is part of the *Combretum-Terminalia* woodland.

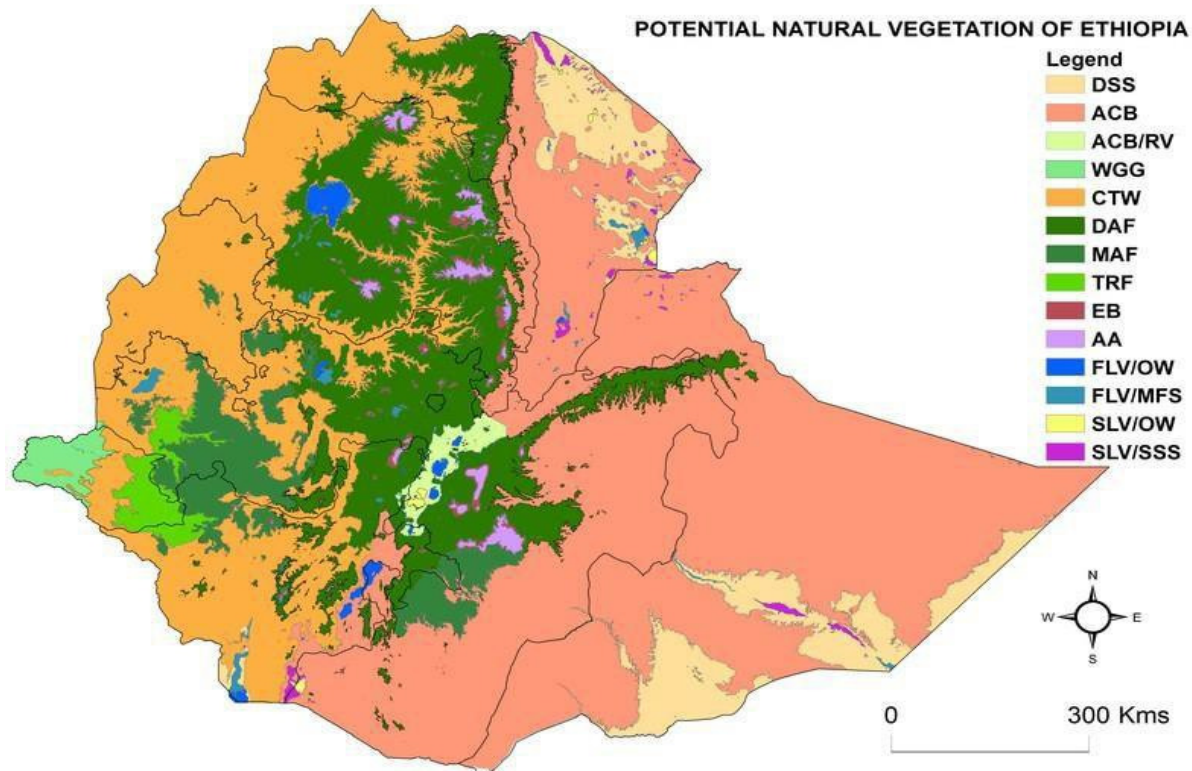


Figure 25-Potential Vegetation Map of Ethiopia

(Source: Friis et al. 2011)

6. High Forest

The Ethiopian Forestry Action Plan of Ethiopia speculated that about 35% of the area of Ethiopia (which then included Eritrea) was once forested (EFAP, 1994) but failed to substantiate the information with tangible facts. The high forests of Ethiopia may be categorized into Dry Evergreen Montane forests and Moist Evergreen Montane forests. Dry evergreen forest occur in the northern and central parts of Ethiopia where the sub-humid climate prevails while moist evergreen forest occur in the southern and southwestern parts of Ethiopia where humid climate prevails. For a long time high only forests with three stories (canopy layers) and canopy cover exceeding 75% were considered as forest proper. Accordingly the current high forest cover of Ethiopia varied between 3 and 2.5% depending on different estimates. Currently FAO has provided a definition of forest which included areas formerly understood as woodland. According to FAO (2011) forest is defined as land with tree crown cover of more than 10 percent of the ground with area exceeding 0.5 ha. Tree height at maturity should exceed 5 m. (FAO, 2011). The new forest definition included the broad leaved deciduous *Combretum-Terminalia* woodland, *Acacia-Commiphora* woodland and the Acacia woodland.

Earth Trends (2003) gave the various classes of forest in Ethiopia as (a) those covering greater than 10% accounted for 47.36%, (b) those forests with canopy cover greater than 25% accounted for 24.14%, (c) forests with crown cover greater than 50% accounted for 8.25 % and (d) forests with crown cover greater than 75% accounted for 3.15%. These estimates however did not consider tree height at maturity and the vegetation cover with 10% crown cover is therefore highly over estimated. The same document gives the forest cover of Ethiopia as 4.16%. This indicate that the crown cover data are gathered using different methodologies and estimates may differ substantially. The total forest cover of Ethiopia meeting the definition of the FAO, 2011 reported as 13% is therefore doubtful since it is not supported with tangible data.

The dry evergreen montane forests of Ethiopia with *Juniperus procera* , *Olea europaea* subsp. *europaea* and *Podocarpus falcatus* co-dominants occur sparsely scattered irregularly as remnant forest patches such as inaccessible areas, church yards, Holy places and sacred areas whereas the moist evergreen forests with *Pouteria adolfi-friedericii*, *Albizia* and *Ficus spp.*, dominating interchangeably depending on variations in habitats occur more extensively. The apparent extensive moist evergreen forest cover however is deceptive since close inspection of these forests would reveal that the biodiversity is impoverished as a result of the coffee growing underneath.

7. Plantation Forest Resource

Ethiopia has a long history of tree planting activities. According to historical records, afforestation started in the early 1400s by the order of King Zera Yakob (1434-1468). Modern tree planting using introduced tree species (mainly Australian Eucalyptus) started in 1895 when Emperor Menelik II (1888-1892) looked into solutions for alleviating shortage of firewood and construction wood in the capital, Addis Ababa.

An official estimation of plantation forest in the country has been given by Woody Biomass Inventory and Strategic Planning Project at approximately 500, 000 ha (WBISPP, 2005). Close to 27% of the total plantation forests were established as community plantations between 1978 and

1989 by the Derg regime. *Eucalyptus* species (58%) and *Cupressus* species (29%) are the dominant species of those plantations. Though no formal survey has been conducted since the WBISPP (2005) report, recent document compiled from regional reports raise the national plantation forest coverage to 972,000 ha (Million Bekele, 2011). According to this document only 20 percent of the total plantation is categorized as large scale and industrial plantation. The few wood industries in the country utilize these forests to produce sawn lumber and poles. The products from these few industries is by far less than the national demand for forest products which therefore is compensated by importing timber products worth 430 million ETB annually. The vast majority of the plantation (80%) on the other hand is comprised of plantation forests created through government rehabilitation programs, annual national plantation schemes, community based watershed development programs, individual woodlots and trees in the traditional agroforestry systems.

Small-scale plantations are getting momentum since the last one and half decade (Mulugeta Lemeneh, 2010). The major drivers for the expansion of smallholder plantations are income generation from tree products and self-sustenance in meeting household energy demands. The Ethiopian forest policy (1999) encourages the expansion of smallholder plantation in the form of woodlots and agro-forestry. The policy also prescribes incentive mechanisms for those smallholder farmers that increase their tree crop holdings. However, being unaware of the provisions instated in the country's forest policy farmers are being driven by the high local, national and international demands for wood and wood products. According to the review by Mulugeta Lemeneh (2011), the major reasons that are initiating the smallholder farmers in Ethiopia to expand and establish smallholder plantation are two: wood scarcity both for construction and fuel wood and thus the need to satisfy household subsistence demand, and to generate cash income. In some communities, eucalypt trees are regarded as insurance resource or life savior, since they are cut and readily converted to cash during critical needs (Mesele Negash 2002). In other societies, such as the Gurage, planting eucalypt is a privilege and obligation of all households not only for meeting household wood requirements and generate cash revenues but to preserve social pride and reputation (Negussie Achalu 2004). Individually owned woodlots also bestow a considerable reputation and social value to the owner, and these reputations depend very much on the size of the woodlots.

Recently, the Ethiopian government has taken a big initiative to create climate resilient green economy to be achieved by 2025. The forest sector as one of the pillars in the CRGE strategy has prioritized afforestation, reforestation, and forest management programs to increase carbon sequestration in forests and woodlands.

8. Bamboo forests

Bamboo belongs to the subfamily Bambusoideae and family Poaceae. There are More than 1,500 species and 90 genera of bamboo are found in the world, covering 36 million hectare (ha) of land which is distributed in the tropical and sub-tropical belt ((Zhou et al., 2005;FAO, 2007). Africa has 43 species and 9 genera covering about 1.5 million ha and forty of these species occur only in Madagascar (FAO, 2007).

There are only two bamboo species in Ethiopia, namely the high land bamboo, *Arundinaria alpina* K.Schum. Growing between 1200 to 1800 m covering 1,000,000 ha and the low land bamboo

Oxytenanthera abyssinica (A. Rich.) Munro covering 300,000 ha (Ensermu Kelbessa et al., 2000; Kassahun Embaye, 2003) and Ethiopia, home to 86% of the overall bamboo and rattan forest in Africa.

Lowland bamboo grows in the western parts of Ethiopia along major river valleys and the lowlands bordering Sudan often forming extensive stands. The highland bamboo is found naturally in the south, southwest and central highlands of Ethiopia at 2,200 to 4,000 m.a.s.l.

Bamboo forests are known to be effective in protecting hillsides from soil erosion though the complex network of fine roots which facilitate percolation of water to the deeper water table thus playing a significant role in ecosystem services. The profuse litter fall of bamboo improves soil structure and fertility (Fanshawe, 1972). The easy workability, strength of the fibers, straight and uniform boles and short maturity period makes bamboo a tree of high prominence for commercial and domestic uses including furniture, building, pulp, bio-energy, food, forage and medicine (Liese, 1985).

9. Geological settings

The geologic and tectonic situation of Ethiopia (figure 7) is strongly linked to the development of the East African Rift System and of the Ethiopian magma dome. This dome can be differentiated into three major geological settings: Precambrian complexes occur in the north and the west that are strongly folded and where granites or granitoides outcrop. The actual dome originates from the ballooning of a magma chamber and as a consequence volcanic activities, such as fissure eruptions and developed multiple basalt layers (Boccaletti et al., 1998). These Mesozoic to Tertiary layers cover most parts of the Ethiopian Highlands and the Somali Plateau. The Somali Plateau and the Ethiopian Highlands are not significantly folded. However, the Lake Tana region and the Graben shoulders of the Rift Valley constitute an exception where Precambrian Rocks outcrop.

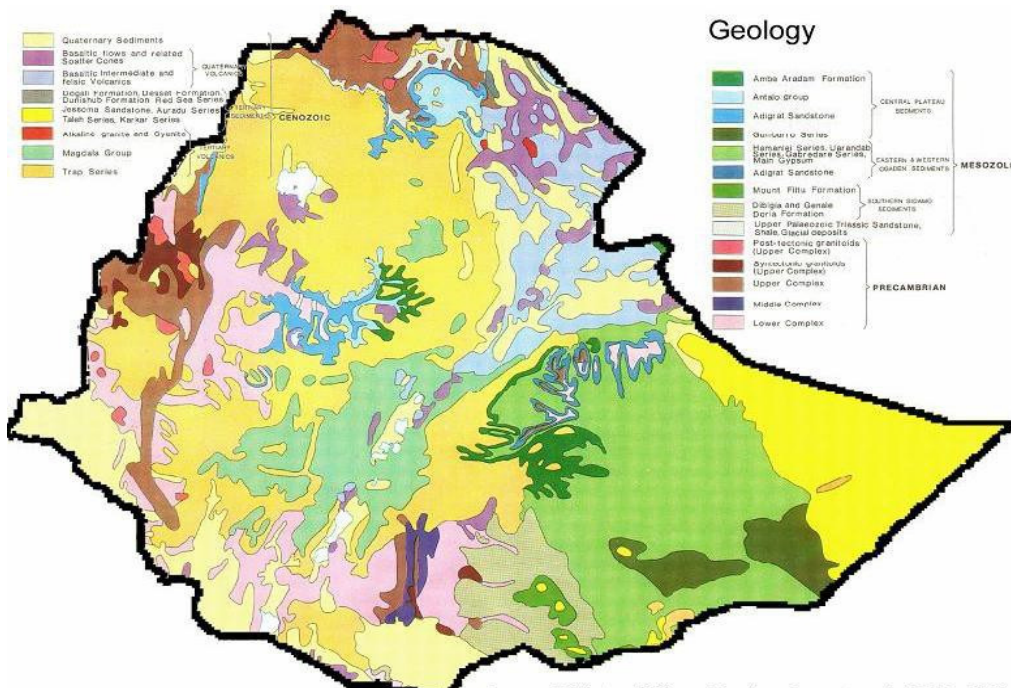


Figure 26-Geology of Ethiopia
Source: Modified after the Ethiopian Mapping Authority (1988)

10. Topography and Relief

Ethiopia has great geographic diversity with high and rugged mountains, flat topped plateaus, deep gorges, incised river valleys and rolling plains. The Danakil Depression is located at 125 m below sea level (b.s.l.) while the highest point is Ras-Dashen with 4.620 m above sea level (a.s.l.) (CIA, 2005).

The northern and western parts of Ethiopia, with the exception of the Afar Triangle, are dominated by very rugged terrain with high plateaus (> 2200 m a.s.l.) and deeply incised valleys, such as the Nile drainage system.

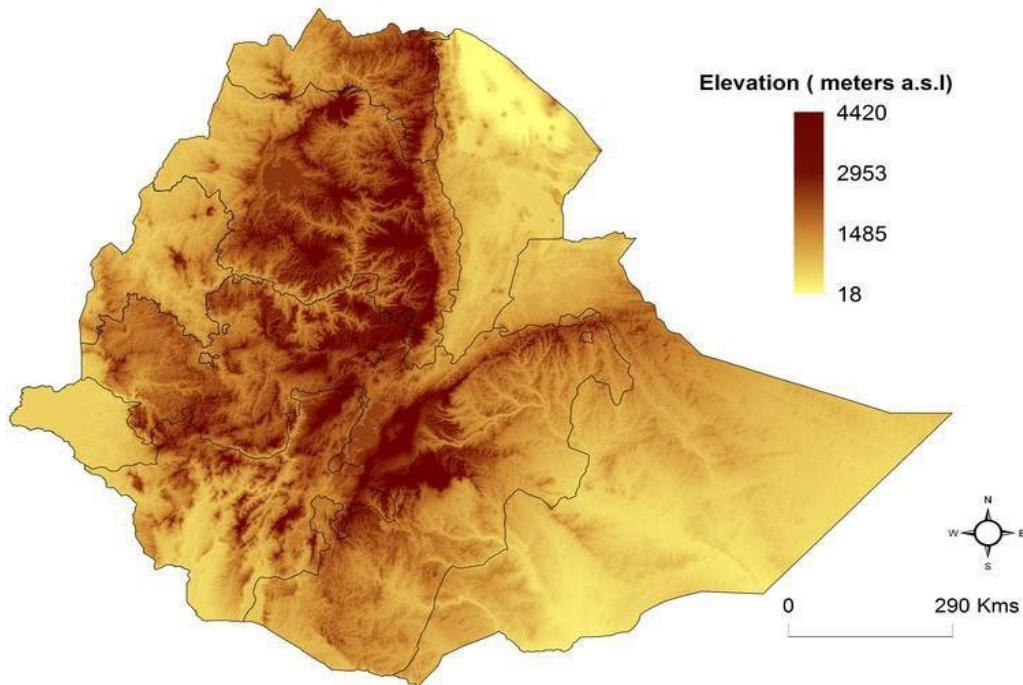


Figure 27-Topography/ Relief of Ethiopia

Source DEM: Jarvis, et.al. 2008

The physical conditions and variations in altitudes have resulted in a great diversity of climate, soil and vegetation. The Ethiopian relief includes a range of altitudes stretching from below sea level to nearly 4600 meters above sea level. Within these extremes, about 50% of the land surface is above the 1500 m contour line. The difference in altitude and therefore of climate conditions have provided the scene for a wide variety of cropping patterns in agriculture. The extreme difference in altitude has also created the conditions for high potential in the production of hydro- electric power.

11. Major Drainage Basins

The major drainage systems are of endogenous origin. The drainage systems are of canyon shaped character in the northern Ethiopian Highlands whereas the drainage valleys in the southern Ethiopian Highlands (Kaffa) and the Somali Plateau are v-shaped. The drainage basins of Ethiopia is described as exoreic (eastern and western drainage systems: Nile Basin) and endoreic (Main Ethiopian Rift drainage systems: Awash River, Lake Region, Abaya-Chamo Basin, Chew Bahir Basin and Omo River).

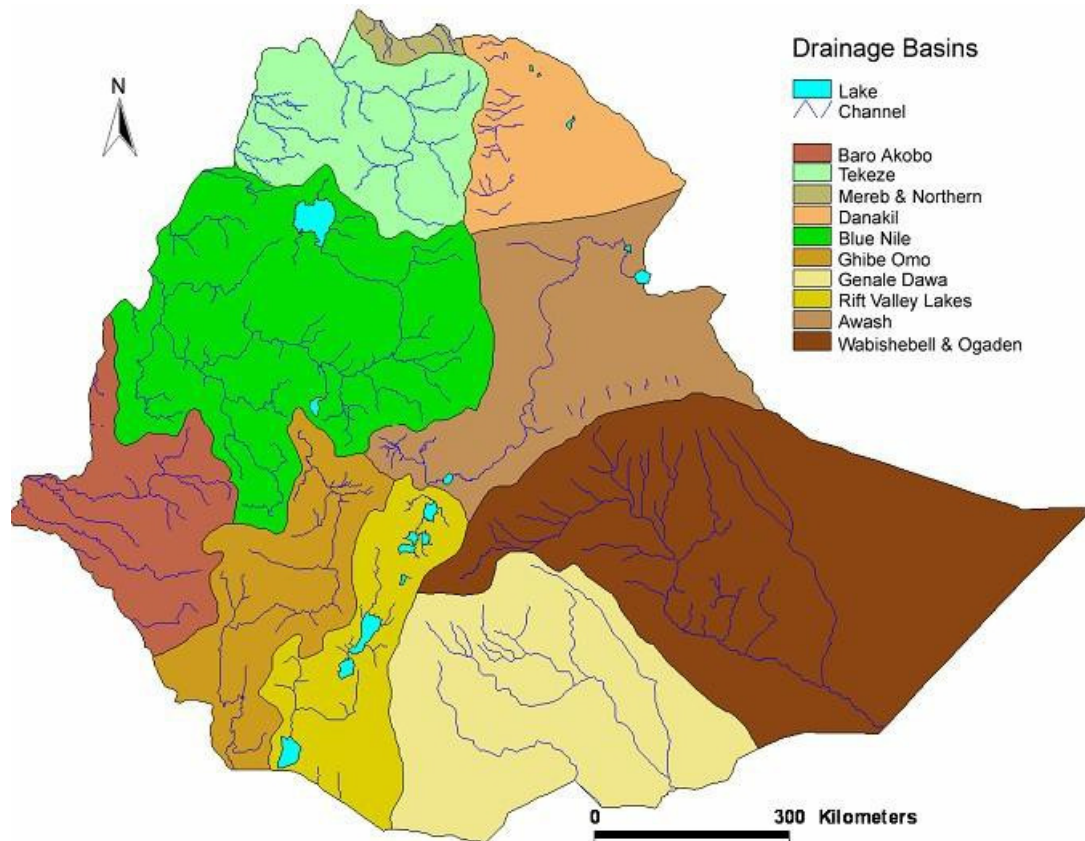


Figure 11-Drainage Basin of Ethiopia

Source: Sileshi Bekele, 2001

12. Climate Pattern

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). Two major air streams cause dry and rainy seasons from late June to early September, when the ITCZ is northernmost, the equator dominant air stream direction is south-east in southern Ethiopia and south-west in central to northern Ethiopia. These warm and moist winds are the result of high evaporation and water vapor saturation of the air mass both above the Indian Ocean and the Atlantic Ocean and Congo Basin, respectively.

Precipitation and temperature gradients are strongly dependent on altitude; while precipitation increases, temperature decreases with increasing altitude. The three major climate classifications characterizing Ethiopia are therefore very elevation dependent (Köppen, 1931):

- Cwb-, Cfb-, Cwc-climates in the Ethiopian Highlands, which are of warm to cool mountainous semi-humid to humid characteristics.
- As-, Aw-, Am-climates in the lowlands, which are of semi-humid to semi-arid characteristics surrounding the highlands.
- BWh-, BSh- and BSk-climate in the Afar-Triangle and the Somali Region.

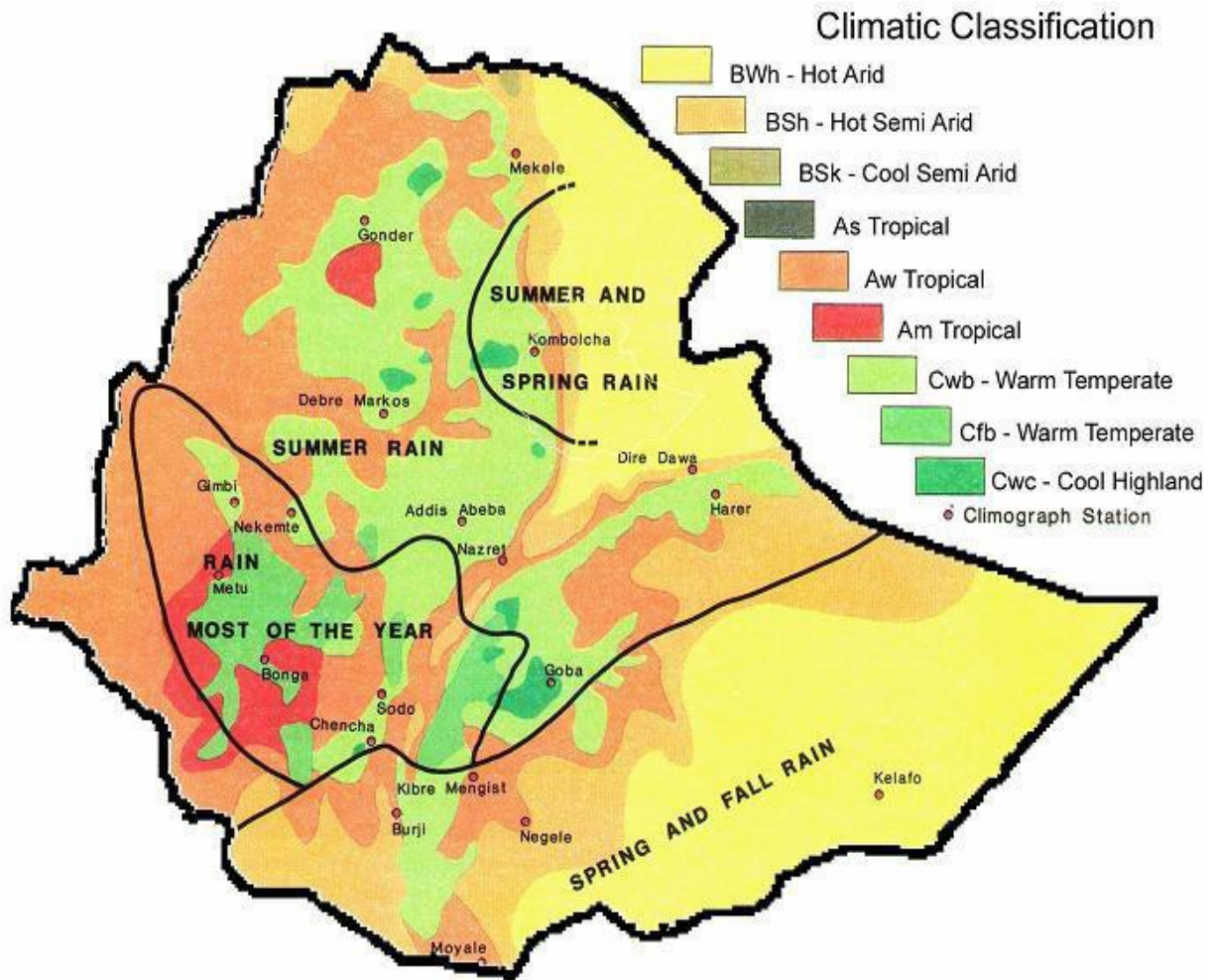


Figure 12-Climatic Classification after Köppen & Geiger

(Modified source: Ethiopian Mapping Authority Services, 1988)

Precipitation across the country is characterized by high spatial and temporal variability (figure 10). 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.

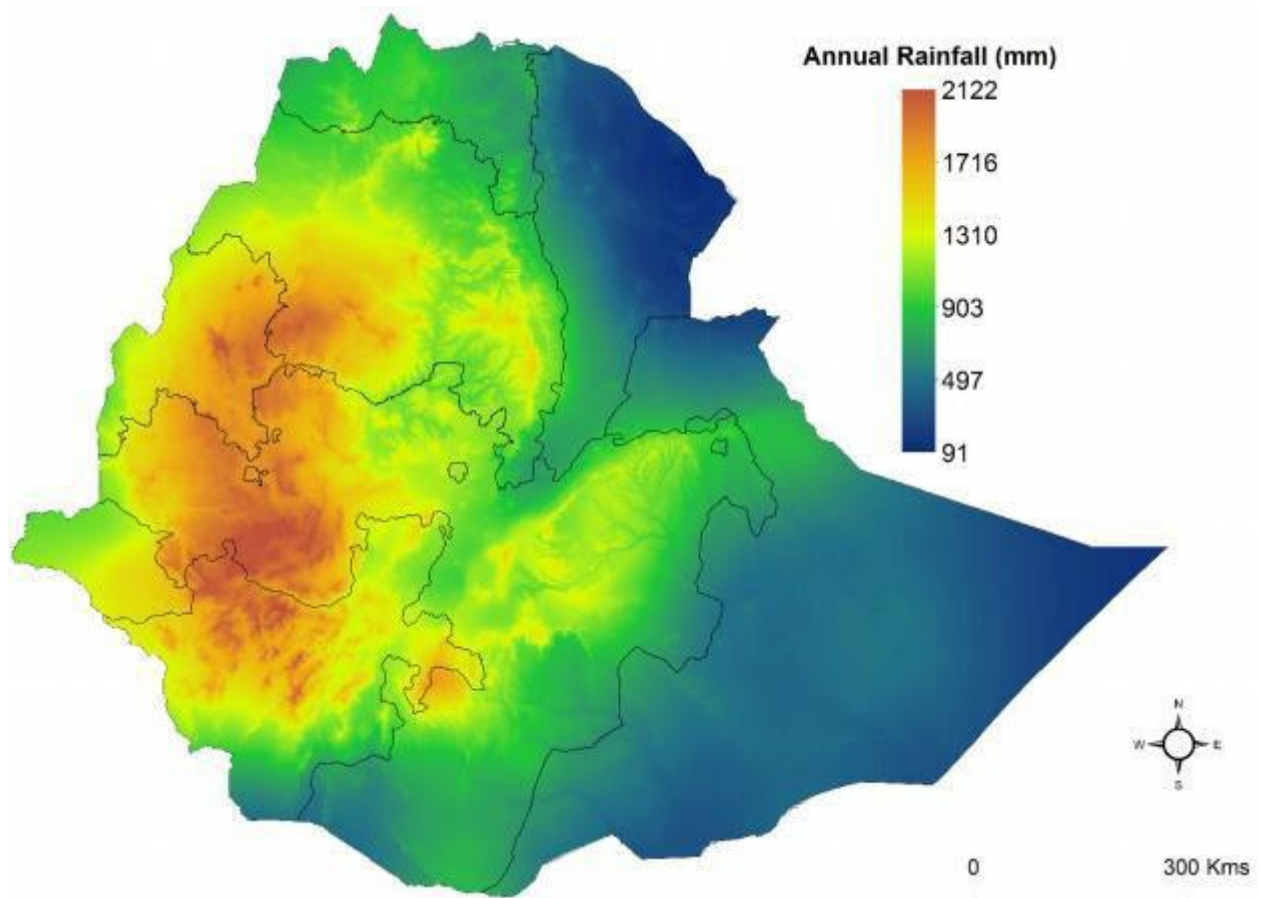


Figure 13-Mean Annual Precipitation

On inter-annual time scales, precipitation in Ethiopia is highly seasonal, with the time and length of the different seasons varying by location. While the southern-eastern parts of the country experience precipitation maxima in spring and autumn, central Ethiopia has its main precipitation volume in spring and summer. The north-western part has its maximum in summer. In some localized parts in the South of the country, the maximum precipitation occurs in spring, winter and summer (figure 10 and 12; Delliquadri, 1958; Westphal, 1975; Eklundh & Pilesjö, 1990).

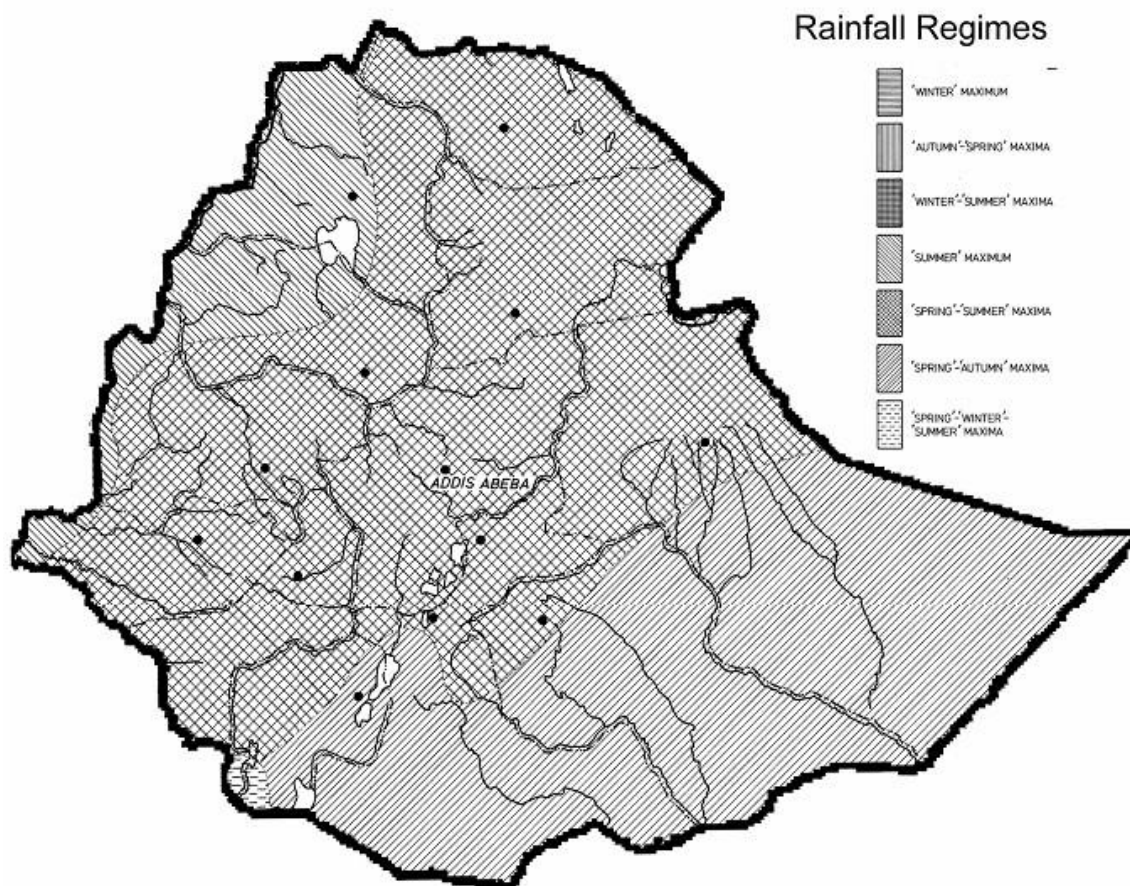


Figure 14-Rainfall Regimes

Modified source: Ethiopian Mapping Authority Services, 1988

13. Major Soils of Ethiopia

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 hectare.

Table 18-Soil Type of Ethiopia

Soil Type	Coverage (Square Kilometer)	Per cent	
		of the Total Land Area	of the Total Arable Area
Litholos	210,585	17.1	
Nitosols	150,089	12.2	23
Cambisols	144,438	11.6	19
Regosols	135,613	10.9	
Vertisols	123,585	10	18
fjuvisols	102,461	8.3	

Source: LUPRD 1984

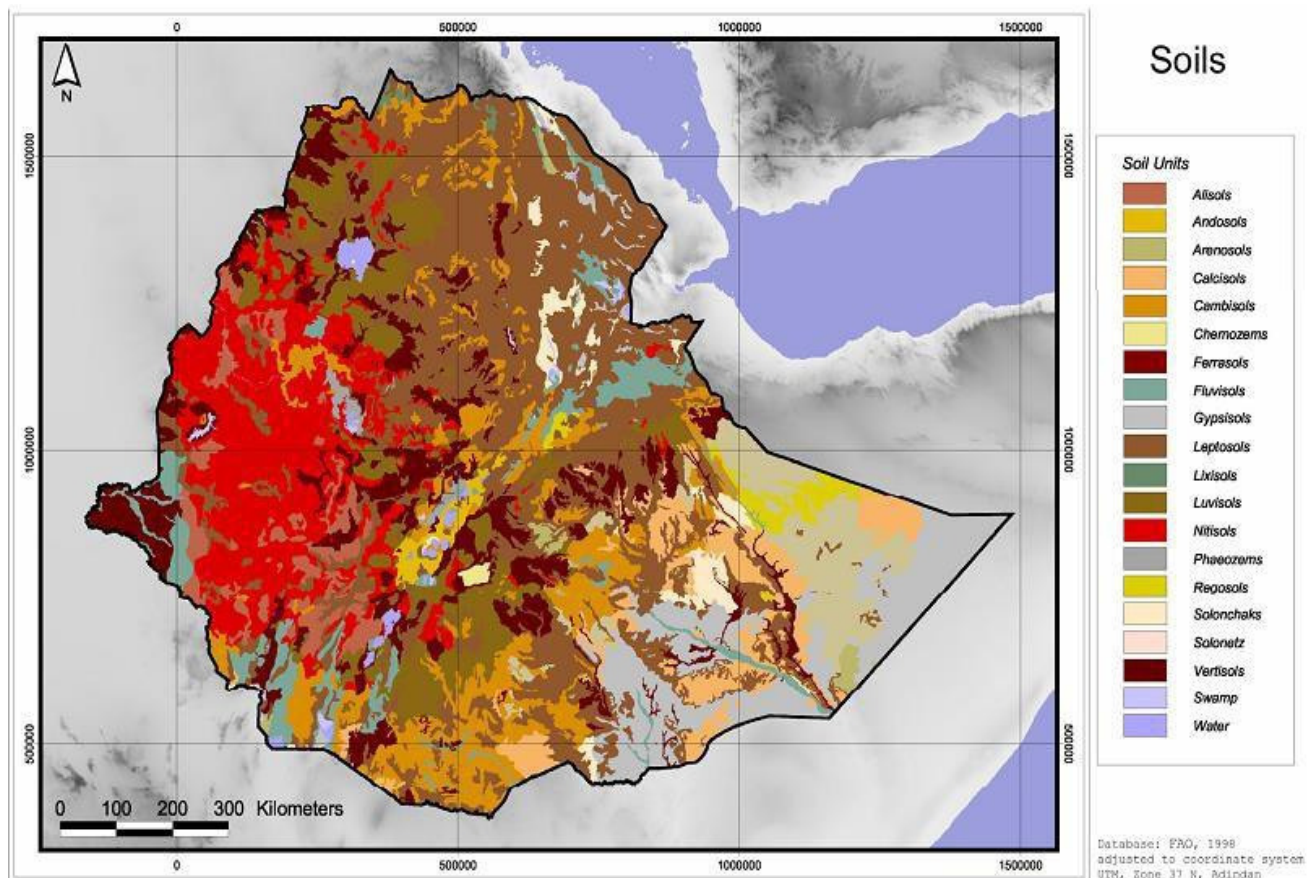


Figure 15-Soils Types of Ethiopia

Source: FAO, 1998

14. Water Resources

4.4.2 Surface Water

The country has 12 river basins. The total mean annual flow from all the 12 river basins is estimated to be 122 BMC (MoWR, 1999). The Ethiopian plateau is the source of the Abay, Tekeze, Mereb, Baro, Akobo and Omo rivers that flow to the west and southwest. The Baro/Akobo basin is potentially the largest possible irrigable area although none of it has yet been developed probably because of the large investment requirement and the distance from the central market for commercial agriculture.

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. This is also the river providing 440 giga watt hour (GWH) which is 20% of the current energy requirement of the country from hydroelectric power source. The remaining potential for irrigated agriculture using Awash River is estimated at 136 220 hectares (Aberra Mekonen and Deksios Tarekegne, 2001). The potential for developing irrigated agriculture nationally is given in Table 8.

Table 19-Potential for Irrigated Agriculture in Ethiopia

Basin	Abay	Awash	Baro Akobo	Genale Dawa	Mereb	Omo Gibe	Rift Valley	Tekeze	Wabi Shabele	Total
Hectare	711,000	206,400	483,000	326,000	38,000	348,100	46,500	302,000	122,000	2,583,000

Source: Aberra Mekonen and Deksios Tarekegne (2001)

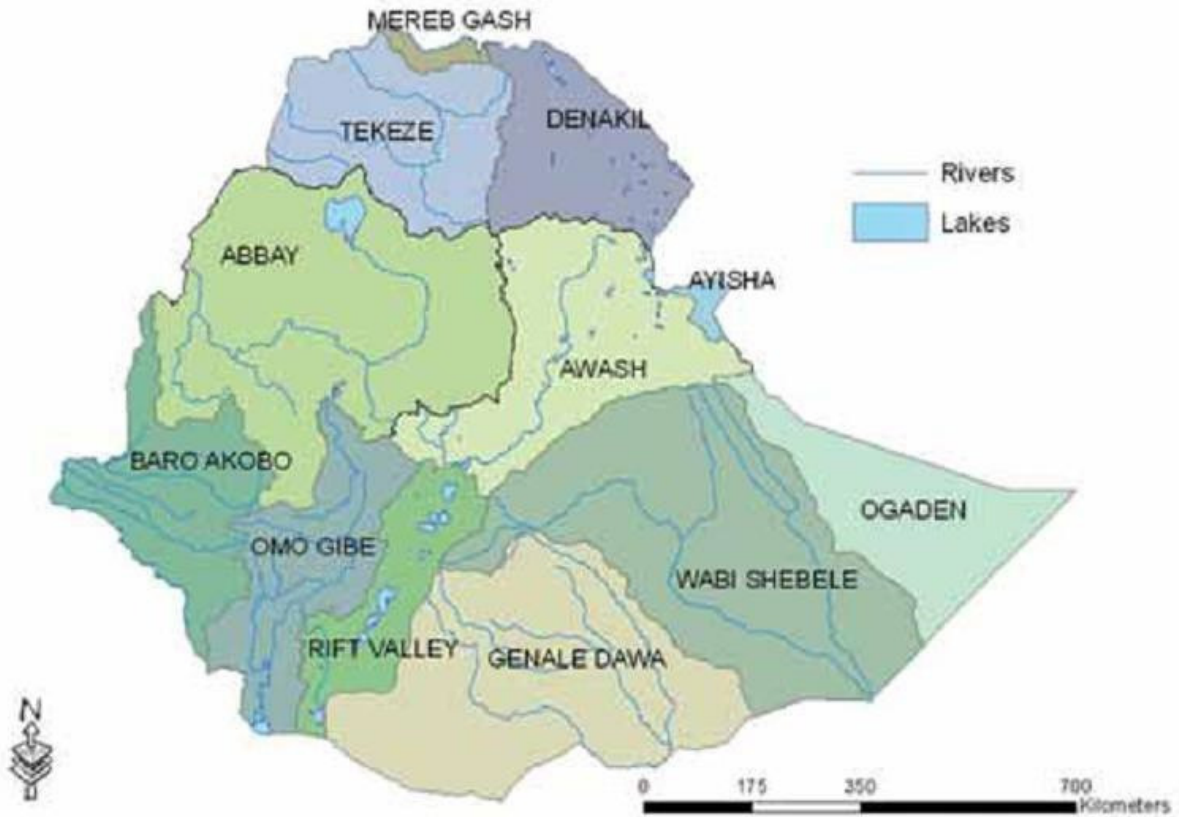


Figure 16-River Basin Map of Ethiopia

Source: Sileshi Bekele, et.al.2007

4.4.3 Ground Water

As compared to surface water resources, Ethiopia has lower ground water potential. However, by many countries' standard the total exploitable groundwater potential is high. Based on the scanty knowledge available on groundwater resources, the potential is estimated to be about 2.6 BMC (Billion Metric Cube) annually rechargeable resource; see also table 2, which provides a little higher value. Tadesse K. (2004) estimated that at least 13.2 billion m³ infiltrates into the groundwater system of which 50 percent could be extractable.

4.4.4 Hydropower

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. Power was so short in 2009 (less than 10%) of what was required. Recently, the government has embarked on an ambitious mega dam building program to harness the problem. Three hydropower plants with a combined capacity of 1.18 GW were commissioned in 2009 and 2010 alone, more than doubling the previous installed capacity of the country. The largest hydroelectric plant in Ethiopia, Beles, began initial operation in May 2010. Contracts for five more large dams have been signed. Once completed, which is expected to be around 2015, these dams would increase the installed capacity by more than 11 GW from less than 1 GW in 2008. The construction of more large dams is foreseen in a Master Plan that aims to bring capacity to 15 GW. The country has a plan to export power to Sudan, Kenya, Djibouti and even Yemen and Egypt. Many dams are multi-purpose dams that are also designed to provide water for irrigation and flood control.

Figure 28-Hydropower Generating Rivers of Ethiopia

Name	Installed capacity (in MW)	Commissioning	Basin
Koka	42	1960	Awash River
Awash II	36	1966	Awash River
Awash III	36	1971	Awash River
Fincha	134	1973	Fincha (Blue Nile)
Gilgel Gibe I	180	2004	Gilgel Gibe River
Tekezé	300	2009	Tekeze (Atbara)
Beles	460	2010	Lake Tana (Blue Nile)
Gilgel Gibe II	420	2010	Omo River (no dam, fed by GG I)
Gilgel Gibe III	1,870	2015	Omo River
Fincha Amerti Nesse (FAN)	100	2012	Fincha (Blue Nile)
Halele Worabese	440	2014	Omo River
Gilgel Gibe IV	2,000	2015	Omo River
Chemoga Yeda	278	2013	tributary of the Blue Nile, near Debre Markos
Tendaho Irrigation Dam	none	2014	Awash River
Genale Dawa III	256	2009	between Oromo and Somali state
Grand Ethiopian Renaissance Dam	6000	2018	Blue Nile River

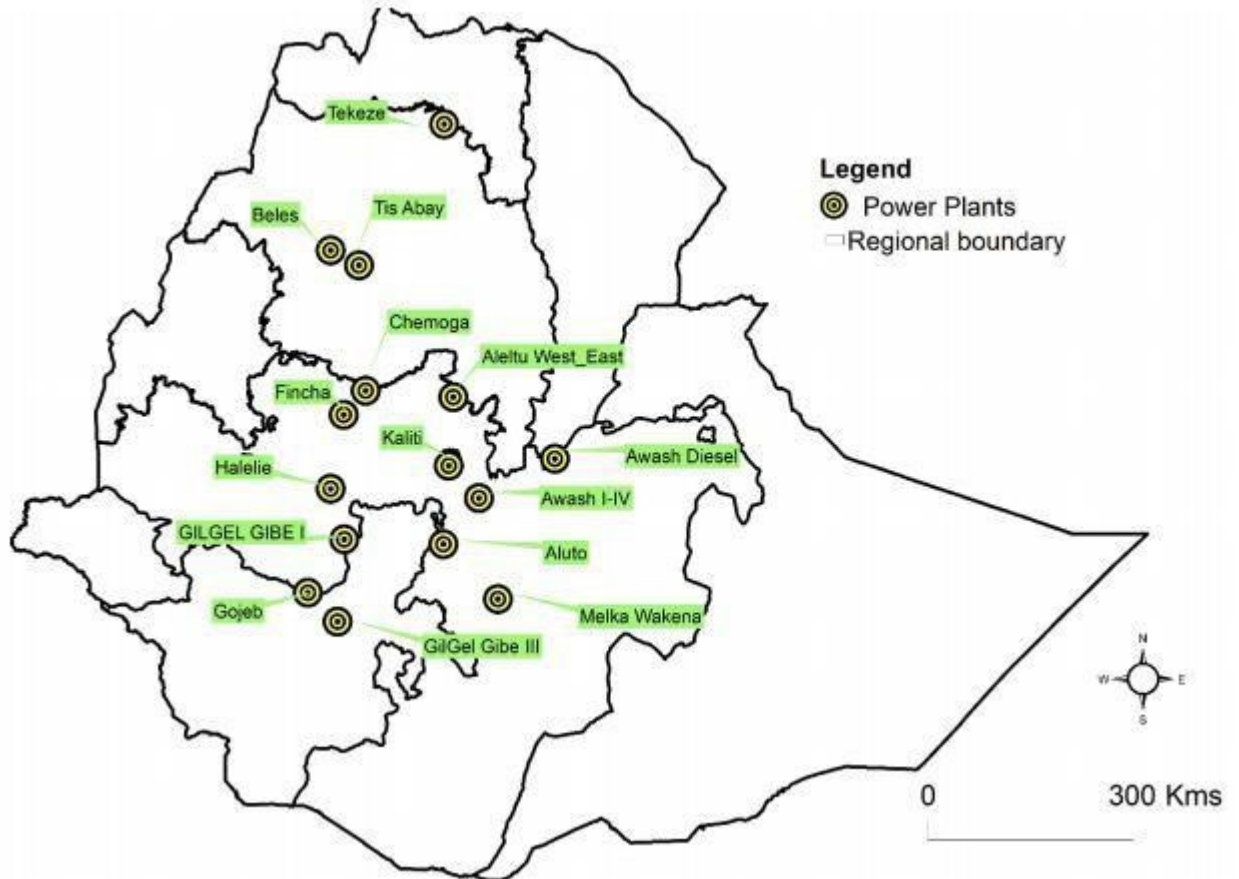


Figure 17-Hydropower Generating Stations of Ethiopia

Source: <http://www.infrastructureafrica.org/system/library/2010/02/>

4.4.5 Road Network

The Road Sector Development Program (RSDP) which was launched in 1997 is now in its Phase IV of implementation stage since 2010. In its 16 years implementation action, the total road network expansion of the country has reached 85,966km. When the program was launched in 1997, Ethiopia's total road coverage was standing at 26,550km. Reports depicted that the overall performance of the Woreda roads sub-sector has not been impressive in phase IV of the program which had planned to construct 40,044km of roads but achieved only 27,628km. The total Federal road coverage has increased by 62 % with 11,301 km of asphalt and 14,455km of gravel road. The regional road network has also reached to 32,582km in the 16 years of the program.

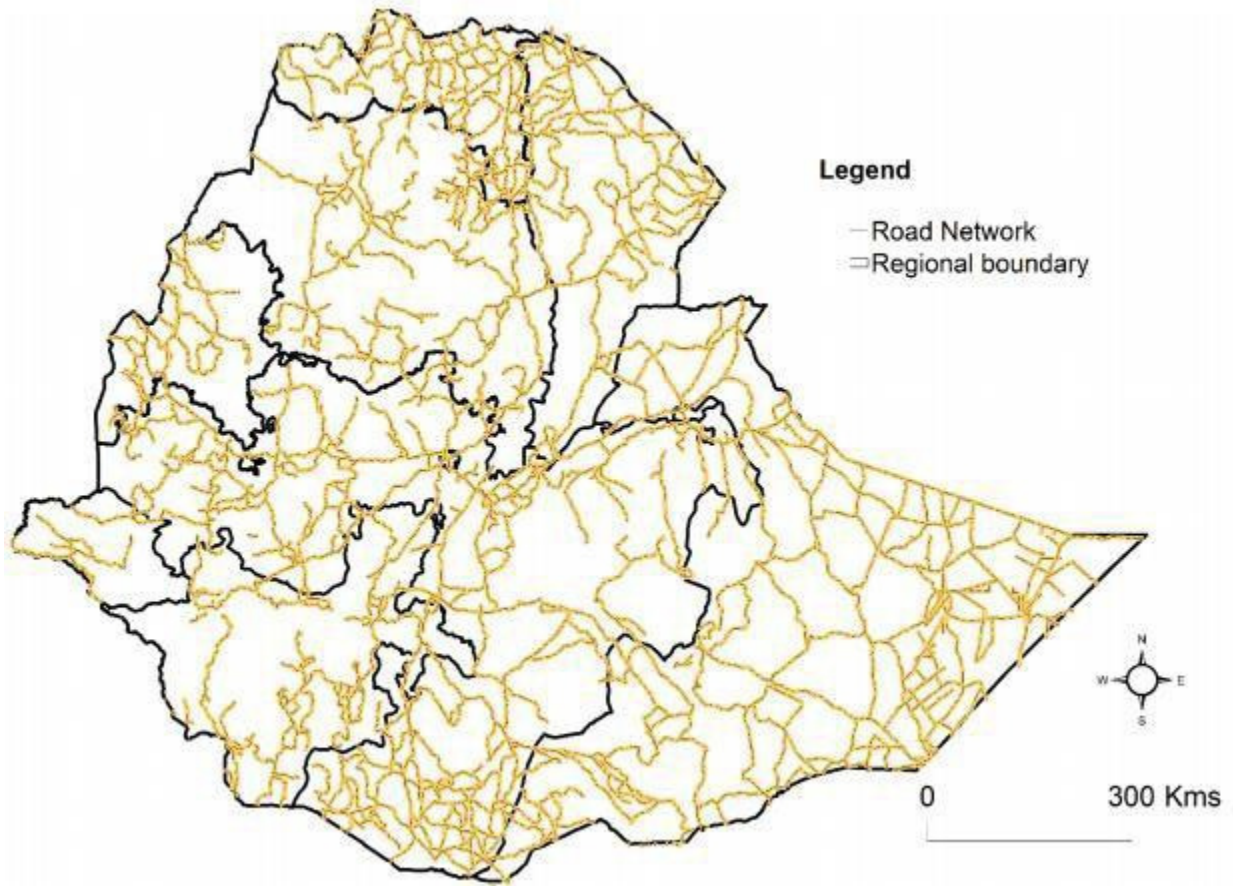


Figure 18-Road Network of Ethiopia

(Source:<http://www.infrastructureafrica.org/system/library/2010/02/>)

5 Oromia Baseline Situation: The People, Culture, Identity and Forest

5.1 Demographic, Ethnic and Religious Features

Based on the 2013 Central Statistics Authority population projection, the population of Oromia reached 33,691,991 in 2015. The demographic figures show almost a 50:50 ratio of men and women dominated by more than 50% young and dynamic population group (CSA, 2013, BoFED, 2013). Oromia is home for more than 88% of the ethnic Oromo. Whereas, twelve percent of the population of Oromia belongs to the different ethnic groups (Amhara, Hadiya, Sidama, etc). More than 87% of the people of Oromia live in rural areas while 13% reside in urban areas (CSA, 2007). Exploring the 200714 census, religious wise about 48% of the people residing in Oromia follow Islam, 30% Orthodox Christian, 18% Protestant, three percent Traditional, 0.5 percent Catholic, one percent others respectively.

5.2 Oromo People, Culture and Identity

The Oromo have rich culture and a well-developed age-based system upon which the religious, political, economic and social life of the people are organized. Among others, the *Gada* system which organizes Oromo society into age groups and rotates leadership in every eight years is a remarkable egalitarian democracy. The *Gada* institution is still functional in different part of Oromia in general and Borena zone in particular and works very well along with the modern administration. In the system, elders are considered to be wiser and responsible for teaching, resolving conflicts, and nurturing Oromo culture. The system helps to exercise democracy, participatory government and leadership.

Before the expansion of Islam and Christianity, the Oromo had their own traditional religion called *Waaqeffannaa*, the belief in *Waaq* (the supreme God). The religion teaches *Safuu* (do's and don'ts) to help them live together in peace, prosperity and faithfulness to each other. The *Kallu* as ritual leader is the most senior men in the kinship system. All major conflicts will be taken to them for adjudication.

The Oromo people have several subgroups who vary in their cultural outlook and livelihoods, although most of them speak the East-Cushitic language Affaan Oromoo (Oromo language). Many of the Oromo groups, including the Arsi, Borana and Guji, have developed distinct sub-identities. Broadly speaking, however, there are five main groups of Oromo:

- 1) The Western Oromo live mainly in the Wollega area and are settled agriculturists. Many have been converted to evangelical churches and other Christian sects by missionary churches.
- 2) The Northern Oromo live in Shoa and some areas of Wollo are more integrated into the Amhara cultural sphere than other Oromo. The northern Oromo are generally bilingual (speak both Amharic and Oromiffa), and most of them follow Orthodox Christianity. Some pockets of Oromo are also found as far north as Tigray.

14 This is the latest data with breakdowns on the religious composition of the population of Oromia.

- 3) The Southern Oromo consist of smaller sub-groups without regional cohesion. Many are pastoralists and have a semi-nomadic lifestyle.
- 4) The Eastern Oromo live in the Harerge area and in the towns of Harar and Dire Dawa. They have strong links to the Arab world through ancient trade routes and the practice of Islam. Many eastern Oromo leaders are vocal supporters of political Islam.
- 5) The fifth Oromo grouping is the Borana, considered by many to be the 'original' Oromo. They live in the southernmost part of Ethiopia and across the Kenyan border.

The Borana have partly kept alive the traditional *Gada* system – among other things, a politico-administrative system – where male age-groups hold the leadership office in the community (*Abba Gada*) on an eight-year rotating basis. Women are excluded from participating in the *Gada*, and are believed to acquire influence and privilege by virtue of their relationships with the men passing through the *Gada* grades. The *Gada* system goes beyond politico-administrative purposes, but also provides a framework for the Oromo way of life.

Pastoralism is a significant socio-economic sector in Ethiopia. It is a tenure system that evolved to meet the constraints of local, often difficult, environments and to facilitate the operation of complex spatial and temporal land use patterns. The communities in the lowland areas keep livestock as a saving investment. The communities in the lowland areas are pastoralists that have a transhumance system for coping seasonal hard times. The transhumance system in the lowland Oromo community is a well-known tradition known as *Godaantuu* (explained in detail under section three).

Though sedentary agriculture is the main source of livelihood for the majority of the rural population in the region, pastoralism and agro-pastoralism livelihood system is common in low land areas. There are 33 pastoral and agro-pastoral Woredas in the region, distributed in 6 zones (Borana, Guji, Bale, East Hararghe, East Shewa and West Hararghe). The pastoral and agro-pastoral areas of the region covers about 152,170 km², accounting for about 37% of the total area. Its total human population size is estimated to be about three million whereas about 30% of the livestock population of the region is found in pastoral and agro pastoral areas.

5.3 Oromo Traditional Resource Management and Conflict Resolution

Traditional resource management practices of the Borena people are based on complex customary administrative structure of the *Gada* system that applies the customs and laws of the Borana (*Adaseera*). The smallest territorial unit among the Borana is the *Warra*, which constitutes a Borana household. A group of *Warra* with associated cattle enclosures constitutes an *Olla*, or village. Clan affiliation is not necessary to ensure cooperation within a village where several clans may exist, and *Warra* members cooperate based on being Borana and sharing territory. Adjacent villages together constitute the next territorial unit, the *Ardaa*. At this level, a council of elders (*Jarsaardaa*) is

nominated to deal with the management of communal pasture, and intervenes when there are signs of pasture depletion. Decisions are made at this level regarding lactating stock (*Loon Warraa*), which graze around the villages, and dry stock (*Loon Foora*), which has to be grazed further away to avoid pasture depletion in the vicinity. Neighboring *Ardaa* together constitute a *Reera*, with no rigid boundaries between them. At this level, there is cooperation to mobilize labor for important occasions, and also cooperation on the use of ponds. The next level up is the *Maddaa*, which consists of several *Reera* and is commonly named after a permanent water point. A collection of *Maddaa* together makes up the largest Borana unit, the *Dheedha*, which together make up the entire Borana territory.

The Arsi-Bale have a well-instituted traditional range management systems (herd management, grazing areas, settlement stratification, management of water supply points, hierarchical cohort based responsibilities) most of which are designed for conflict prevention and peaceful coexistence. Their view on nature and environment are instituted in their customary laws not only to protect the natural environment and eco-system, but also to reduce conflicts that may arise on over utilization and rapid depletion of resources. The communities have a customary law that prohibits cutting trees without adequate reasons. Some trees are prohibited for their spiritual, economic, social and cultural values. The type of trees grown in specific areas is also an indication of the availability or shortage of ground water. The *Gada* system and rules allow cutting of trees only for fencing and building houses. Big trees should not be cut and only small branches are permitted for the construction of Barns. The Arsis believe that trees have and sustain life.

The Guji's are also followers of Islam and *Waaqeffanna* with rising number of protestant (Christianity). The *Gadaa* is a social and political institution providing guidance on customary practice of the Guji- Boran society to demarcate dry and wet season grazing, with a set of specific rules and regulations. Such cyclical grazing and range management is compatible to the requirements of range ecology, keeps equilibrium of vegetation dynamics by minimizing overgrazing and depletion of water. As indicated above, the grazing land and water points have their own utilization and management procedures. Grazing land is managed by the *Abbaa Dheedaa*, a person who administers over 15 *Ollaas* and monitors the utilization of large grazing areas. He demarcates the dry and wet season grazing areas, communal and individual enclosures, and plans in consultation with the heads of *Ollaas* the cyclical grazing and migration schedule. This system contributes to the productivity of the rangeland and animals, and reduces the negative impact of drought and conflict. This approach is instituted in these customary laws not only to protect the natural environment and eco system but also to reduce conflicts that may arise over utilization and rapid depletion of resources.

5.4 Institutions in Resource Management and Conflict Resolution

The Oromo people have age old traditional institutions of resource sharing and conflict resolution embedded in their life. They have strong attachment to their respective institutions and systems

which could also boost the OFLP initiative. These include,

- a) The *Gada* system is a political institution of the Oromo where successive generations pass through age based leadership mentoring to assume the higher positions. It has a strong unwritten customary regulations governing forest tenure, resource access, use and management. The *Kallu* is the religious institution of the Oromo. The *Kallu* also handles conflicts and provide adjudication to grievances.
- b) *Religious Institutions*: churches and mosques can involve in forest protection through awareness creation in preaching. These institutions have better acceptance by the community in settling of conflict.
- c) *Godaantuu*: is a transhumance system of Oromo pastoralists, and key feature of traditional human use of forest based resources especially in the Bale/Arsi forested landscape. In this system, livestock, particularly cattle are sent to higher grazing grounds during the months when crops are growing in lower altitude areas or into the forest for shade during the dry season. When drought hits the pastoral and agro pastoral areas beneath the forests of Oromia, the people move to the forests with their livestock for grazing, watering and shelter seasonally. The accession of resources during the seasonal migration of pastoralists and agro-pastoralists is governed by the *Gada* system including, allocation of grazing, watering and shelter areas.

Communities from the lowlands of Bale Zone of Oromia Region make influx into the Hareenna Forest, and settle for 3-4 months in the dry season. *Godaantuu* system is a customary natural resource use practice regulated by the traditional institution called *Abbaa Ardaa*. *Abbaa Ardaa* regulates the opening and closing dates for seasonal livestock grazing, use area and use patterns of grazing in order to avoid degradation of particular areas, and enable particular groups to control their grazing territory.

- d) *Qobbo*: system is a forest (tree) tenure institution that grants first claimers an exclusive use right over a block of forest, usually for collection of forest coffee, hanging beehives and access to other non-timber forest products (NTFP). Once claimed, the forest block is de facto individual property, respected by fellow citizens of the area, and the owner has the right to exclude others. The system is prevalent in Western Ethiopia among people residing outside the forest, but historically have resources (bee hives, coffee, spices) paying service charges for keeping and ensuring access to people.
- e) *Waldaa Jiraatota Bosonaa (Wajib)* is an acronym in Oromo language for forest dwellers association. WAJIB assist to make certain that local people can share the responsibilities and benefits of forest conservation and take decisions about forestry issues that affect their lives. The process leads to collaboration and a relationship of equals. Most importantly, it demonstrates that if people can get secure access to the forests that have long been “protected” by the state alone, there is a huge potential for forests to play a substantial role in contributing to food security and transforming people’s lives.

- f) *Waldaa Bulchiinsa Bosonaa (WaBuB)*: is an acronym for in Oromo language, meaning “Forest Management Association”, originally given by a community which established the first *WaBuB*. The members of the *WaBuB* are thereby granted an exclusive right to use forest products within the demarcated forest area defined in the forest management agreements.
- g) *Seqe-Ayoo* (mother sticks) is a cultural rituals which is exercised by a group of mothers to condemn illegal and non-acceptable activities by community members, also used for forest management. The name of the traditional institution is called “*Sadeta*” which helps in conserving the forest. ‘*Sadeta*’ enforces the traditional rules on the local community not to break the traditional forest management regulation. So anyone who does not abide by the law is pronounced as guilty and will be traditionally punished.
- h) *Awlia*: is a traditional forest management practice applicable as a fear of the punishment of the ‘*Awlia*’ (a person believed to possess supernatural power).’ *Melkamahiber* (a local nongovernment organization) uses the *Awlia* as an opportunity to protect the forest from any harmful activities. *Abakera* and *Arseda* are another traditional believe systems found in Gera Woreda, Meo Kebele supporting activities that protect the forest.

5.5 Most Vulnerable and Underserved Groups in Oromia

Basic principles regarding vulnerable peoples are stated in the articles of the Government of Ethiopia (GoE) Constitution and various proclamations, where the most comprehensive is the Social Protection Policy, approved by the Council of Ministers in December 2014. The policy actions identified vulnerable people encompassing vulnerable pregnant and lactating women, children, the elderly, people with disabilities, labor constrained individuals and households, the unemployed, those exposed to natural and human made calamities, persons living with or directly affected by HIV and AIDS and other chronic debilitating diseases, victims of social problems such as drug users, beggars, victims of human trafficking and commercial sex workers and people with difficulties in accessing basic social services.

Different social assessments conducted by the GoE as part of the World Bank’s Safeguards requirement are reviewed to capture socio-cultural identity of the people of Oromia with special emphasis to underserved and vulnerable groups in the region for Projects/Programs reviewed below to capture;

- i. *Women in male-headed and female-headed households*: In many communities, women become vulnerable because of lack of education, gender bias, tradition and culture, and their reproductive and productive roles. The OFLP will mainstream gender equality in sharing program benefits and strengthen grievance redress as part of citizen engagement aimed at listening to stakeholders and seeking their consensus on OFLP-related activities. OFLP activities would be gender sensitive, including such aspects as household energy demand management, household livelihoods support activities, community forest tenure piloting, and the scaling up of PFM structures. The OFLP benefit sharing mechanism design process, safeguards implementation, community participation and citizen engagement

issues, would also include efforts to ensure and enhance female involvement. M&E indicators would be disaggregated by gender to inform OFLP's adaptive management.

- ii. *Polygamous households*: The form of polygamy (multiple marriages; a marriage of a man to two or more women at a time) is a common practice in many parts of Ethiopia including Oromia. A woman joins her husband in his patrilineal village on his ancestral land, the characteristic of a patriarchal society. The women do not own land and other major assets, and are vulnerable to economic insecurity.
- iii. *Pastoralists*: Pastoral and agro-pastoral groups have historically been among the most underserved communities in Ethiopia. In Oromia region, pastoral and agro pastoral areas account for 33 administrative woredas and around three million people. Beset as it is by a range of adverse conditions, seasonal migratory pastoralism continues to sustain an increasing population.
- iv. *Unemployed Rural Youth*: this vulnerable segment of the population include boys and girls who have dropped out of school for various reasons at secondary or preparatory levels. Others are youths who have returned to live in their birth villages because of not finding work after completing technical and vocational training or university/college education.
- v. *Most Vulnerable Community Members*: these group include orphans, pregnant and lactating mothers, elderly households, and other labour-poor, high-risk households with sick individuals, such as people living with HIV and AIDS, and the majority of female-headed households with young children.
- vi. *Occupational Minorities*: These remain socially isolated and vulnerable groups, despite encouraging improvements in social attitudes and the conditions of these groups in recent years. These group are underserved and excluded from different walks of life based on occupational engagements and nature of livelihoods. The people identified under this group are craft worker; potters, smiths, wood workers, tanners, weavers and basket weaving. The form and nature of exclusion varies across cultures, geography, economic status and nature of livelihood engagement, social status, decision making and participation of the political process. (Pankhurst and Freeman, 2001) Accordingly, some of the excluded in Oromia encompass, the *Idig* (smiths), *fuga* (wood workers), *kallu* (tanners) and potters who produce basic day to day implements to farm production and home use. The group are identified based on their food culture (eating wild games) and religious identity (conversion to Christianity or Islam) as factors determining the level of purity.

5.6 Grievance Redress Systems

In general, grievances related to natural resources arise due to overuse, conservation and management of forests. Forest related grievances take place among communities, communities with guards or communities with outsiders. Largely, grievances related with forests cover issue of resource access, use and control, conflicts over tenure right, pursuing livelihoods (agricultural land expansion) and lack of alternative livelihood options with community's dependence on forests.

5.6.1 World Bank Group Grievance Redress Service

Communities and individuals who believe that they are adversely affected by a World Bank Group 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.

5.6.2 OFLP Grievance Redress Mechanism

Ethiopian Grievance Redress Mechanisms (EGRM): As part of risk mitigation measures, the OFLP would support citizen's complaints or grievances in a formalized, transparent, cost-effective, and time bound manner. All program-affected people would be informed about how to register grievances or complaints, including specific concerns on any OFLP activities. Resolution of different types of grievances can be addressed at different levels:

- *Grievance Redress Mechanisms*: Arbitration by appropriate local institutions such as Local Authorities or community leaders is encouraged. This includes the use of traditional conflict and resource management systems compliance with the local context stated in the section above. The Program would make use of the existing Kebele, Woreda, Zonal and Regional Public Grievance Hearing Offices (PGHO) in Oromia.
- *The Ethiopian Institute of Ombudsman (EIO)*: the EIO, which reports directly to parliament and is independent of government agencies, is now implementing the EGRM with six branches at present, and is responsible for ensuring that the constitutional rights of citizens are not violated by executive organs. It receives and investigates complaints in respect of maladministration; conducts supervision to ensure

the executive carries out its functions according to the law; and seeks remedies in case of maladministration. OFLP would use the EIO regional branch office of Oromia.

- A complainant has the option to lodge his/her complaint to the nearby EIO branch or the respective Public Grievance Hearing Office (PGHO) in person, through his/her representative, orally, in writing, by fax, telephone or in any other manner. Complaints are examined; investigated and remedial actions are taken. If not satisfied with the decision of the lower level of the Ethiopian GRM system, the complainant has the right to escalate his/her case to the next higher level of administration. In addition, some regions (including Oromia) have mobile grievance handling teams at Woreda level to address grievances by clustering Kebeles; and some have good governance command posts to handle cases that have not been settled by the Kebele Manager and woreda PGHOs. The Enhanced Equitable Basic Services Project (being financed by the WB independently of OFLP) is supporting GRM system strengthening including the opening of new EIO branches.
- Where satisfactory solutions to grievances cannot be achieved, the aggrieved party may take the matter before the courts.

6 Stakeholder Identification and Analysis Process

6.1 Overview

Stakeholder engagement is crucial for the sustainability of policy, strategy, program and project design and implementation. It also helps to build local understanding and ownership.

The sixteenth UNFCCC international conference of the parties held in Cancun, Mexico set four stakeholder engagement pillars. The four REDD+ stakeholder engagement pillars are the full and effective participation of relevant stakeholders, in particular Underserved Peoples and local communities, in REDD+ actions; respect for the knowledge and rights of Underserved Peoples and members of local communities; recognizing the importance of "transparent and effective" national forest governance structures; and enhancing social and environmental benefits.

Hence, the government of Ethiopia strongly believes the non- applicability of any development including the REDD+ process without active engagement of stakeholders. Accordingly, the first stakeholder involvement for the National REDD+ process began in 2010 when the R-PP document preparation was conceived. The same year two workshops were held with the objectives of identifying pertinent stakeholders, who would significantly contribute for REDD+ implementation and help to design the institutional set up required for the REDD+ process at National level. Since then a number of national and regional workshops were held across 7 regions (Amhara, Oromia, Southern Nations, Nationalities and Peoples, Tigray, Benshangul Gumuz, Gambella and Somali) with local institutions, and local and forest dependent communities. As part of the CRGE Strategy development, discussions were also held with different sectoral agencies and NGO groups. In this stakeholder analysis, data and information were gathered by applying the tools developed by Howett and Nagu (1997). Inputs were also taken from feedback of the MEF and OFWE on the draft stakeholder analysis framework and from the reviews of the drafts documents on REDD+ strategy, Drivers of Deforestation and Forest degradation studies for national and for Oromia levels, and the Mid-term report of the REDD+ legal and Institutional analysis.

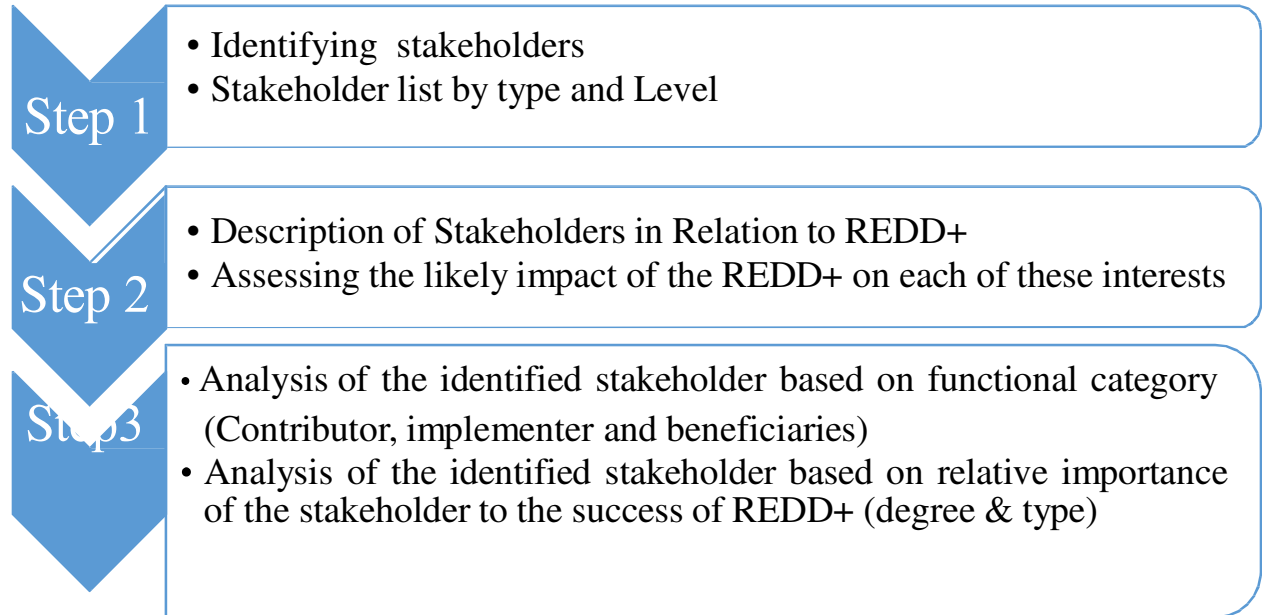
6.2 Objectives of the Stakeholder Analysis

This stakeholder analysis process is needed in the REDD+ SESA and ESMF preparation mainly for two purposes:

- Identify the key stakeholders for consultations. These include those who are directly or indirectly affected by REDD+ implementation process, and/or those who will be directly or indirectly affected by the enforcement of Institutional, policy and legal framework to be developed in REDD+ process; and
- Capture the important concerns and interests of the key stakeholders in the REDD+ implementation process.

6.3 Procedures of Stakeholder Analysis

The identification and analysis of stakeholders was made by following the steps/procedures indicated below (Figure 18):



6.4 Identification of the Potential Stakeholders

Potential stakeholders were identified by reviewing the stakeholders list in the R-PP and other relevant documents provided by client to the consulting firms, and the stakeholders' suggestion during the SESA/ESMF kick off meeting, and by collecting information through questionnaires and interviewing project clients.

The identified potential stakeholders (Table 11) are those who are directly or indirectly affected by REDD+ implementation process or those who will be directly or indirectly affected by the enforcement of institutional, policy and legal framework to be developed in REDD+ process. As shown in the list below, the identified stakeholders are categorized by type as federal, regional and Woreda; governmental, nongovernmental, community based, academia, international, religious and cultural groups.

Level	Type	Stakeholders	Description of Stakeholders in Relation to REDD+
Federal Level	Government Organization	Ministry of Environment, Forest and Climate Change	Proponent and implementer of REDD+ process, the Ministry hosted the national REDD+ Secretariat office, benefited in
	Government Organization	Ministry of Finance & Economic Cooperation	Involve in financial Management of REDD+ at national level.
	Government Organization	Ministry of Agriculture and Natural Resources	Involve in the preparation of policy and strategy on watershed rehabilitation and soil and water conservation, small irrigation, agricultural investment, promotion of agricultural productivity and environmental and social safeguards implementation
	Government Organization	Ministry of Water, Irrigation and Electricity	Involve in the preparation of policy and strategy on Renewable Energy, Promotion and Dissemination of improved energy
	Government Organization	Ethiopian Investment Agency	Involve in the preparation of investment policy and harmonization of it with other policies such as in agriculture, and
	Government Organization	The Ethiopian Road Authority	Involves in the identification of impacts of major roads on forests and prepares EIA for such projects
		Government Organization	Ministry of Women, Youth and Children's Affairs
	Government Organization	Ministry of Federal and Pastoralist Affairs	It is mandated to coordinate the development activities in underserved regions (developing regional states) and it involves in solving conflicts
	Government Organization	Ethiopian Wildlife Conservation Authority (EWCA)	Involves in the management of National Parks and Protected areas, prepare Laws and Regulations on National Parks and Protected areas , implementation of REDD+ increase the number of

	Parliament	Natural Resource and Environmental Affairs Standing Committee	Appeal REDD+ issues in the parliament. Support the implementation of
	Government Organization	The Judiciary	Involve in the implementation of forest laws enforcement mechanisms (regulations)
	Government Organization	Ethiopia Institute of Biodiversity Conservation (IBC)	Provide technical support for REDD+ implementation and conservation of biodiversity is enhanced
	Government Organization	Ethiopian Institute of Agricultural Research (EIAR)	Through research findings help the enhancement of agricultural productivity
	Academia	Academia (Addis Ababa University; Hawassa University- Wondo Genet College of Forestry and Natural Resource; Haromaya University; Mekelle University)	Through research findings help the enhancement of agricultural productivity, provide technical support on forest sustainable utilization of forest resource, these institutes also get research sites
	Private Forestry Sector	Wood-based industries located in urban areas (small, medium and large scale)	Contribute to law enforcement and cooperate with the implementing offices to prevent deforestation by regulating timbers sources to
Regional Level	Enterprise	Oromia Forest and Wildlife Enterprise (OFWE)	<ul style="list-style-type: none"> • In OFWE concessions, implements part of the PFM, livelihoods and A/R activities financed by the OFLP grant in accordance with the MoU to be signed between OEFCCA and OFWE. Sites are not yet selected. • Participates in the REDD+ Steering Committee and REDD+ Technical Working Group. • Provides items for joint annual work program and budget approval (facilitated and coordinated by ORCU). • Reports to ORCU on OFLP implementation.

	Enterprise	Amhara Forest Enterprise	Manage forests in Amhara Region, host the REDD+ Coordination unit of the region implementation of REDD+
	Government Organization	Regional Agriculture and Natural	Involve in the Promotion of Agricultural
	Government Organization	Regional Rural Land Administration Bureau	Administer Rural lands, involve in the implementation of REDD+ process, the implementation of REDD+ help protection of the environment
	Government Organization	Oromia Environment, Forest and Climate Change Authority (OEFCCA)	Designs and implements Forest MIS, Design and implements PFM activities (subcomponent 1.3.1) (out of OFWE concessions) and A/R activities (Subcomponent 1.3.2) in 40 deforestation
	Government Organization	Women, Children and Youth affair Bureau	Involve in coordinating women and Youth associations at regional level. Women and children benefit
	Government Organization	Regional Cooperative Promotion Bureau	Prepare cooperative guidelines, provide technical support during forest

Level	Type	Stakeholders	Description of Stakeholders in Relation to REDD+
			establishment, issue legal cooperative certificate and approve
District Level	Enterprise	OFWE District Offices	OFWE District Office (roughly equivalent to woreda level, but often consists of multiple woredas) would: (i) host the OFLP Coordinator; and (ii) implement work on the ground financed directly by OFLP, such as PFM, and report on implementation progress. There are currently 38 OFWE District Offices covering 130 woredas; ten of these OFWE District Offices cover semi-arid woodlands
Woreda Level	Government Organization	Woreda Administration	Coordinate Woreda Offices

	Government Organization	Woreda Agriculture and Natural Resources Office	Involve in promotion of agricultural productivity and environmental
	Government Organization	Woreda Land Administration Office	Administer Rural lands, involve in the implementation of REDD+ process, the implementation of REDD+ help protection of the environment
	Government Organization	Women, Children and Youth Affairs Bureau	Involve in coordinating women and Youth associations at Woreda. Women and children benefit from the implementation
	Government Organization	Woreda Cooperative promotion Office	Provide technical support during forest cooperative establishment, issue legal cooperative certificate and approve bylaws
	Private	Non-forest Dwellers (urban and rural)	Involve in utilization and dissemination of energy efficient technologies and renewable energy use (e.g., efficient cook stoves and
Kebele	Government Organization	Kebele Administrative	Involve in administration of the resource in collaboration with relevant Woreda sectoral offices
Kebele	CBOs	NTFP gatherers (bee keeper (Sheka forest), wild fruit collectors Gambella Vitleria paradoxa), Hunters, Fishers, Fuel wood collectors, WABUB-, WAJIB, Pastoralist groups	Involve the implementation of REDD+ at grass root level, share the benefit from the forest resource, participate in forest management
Kebele	Communities	Underserved and Forest Dwellers communities	Involve in the implementation of REDD+ projects at the grass root level and share benefits from the forest resources and participate in the management and protection of the

International	Development Partners	Multilateral Development Partners World Bank, UNDP, bilateral development partners Embassy of Norway, UK, Ireland, Netherland, DFID, GIZ	Provide financial and technical support for the implementation of the REDD+ process
All level (Federal, regional and Kebele)	Relevant NGOs working on climate change, Forestry and REDD+	Examples: SOS Sahel, Farm Africa, Ethio-Wetland, Horn of Africa Regional Environment Center and Network (HoAREC&N), World Vision, Environment and Coffee Forest Forum.	Involve in implementation of REDD+, providing technical support
All level	Religious institutions	Churches, mosques, and other relevant institutions or traditional beliefs	Involve in forest protection help awareness creation through preaching and conflict resolution
Region	Traditional institutions	Examples: Aba Geda, Sinqe-Ayoo (Oromia), Gepitato (Sheko), Edir	Play role in conflict resolution
National	Professional Societies, and other relevant Associations	Forestry society of Ethiopia, Environmental Society, Biological Society of Ethiopia, Coffee Trading Association, Forum for Social Studies, Ethiopian Society of Sociologists, Social Workers and Anthropologists	Capacity building, involve in awareness creation activities related to REDD+
National & Regional	Media	Mass media	Dissemination of information about REDD+

6.5 Analysis of the identified Stakeholders

The identified stakeholders were analyzed based on their potential contribution, involvement on implementation and accruing benefits from REDD+ process.

Stakeholders that are identified as implementers are organizations, who are involved or will involve in implementing and managing REDD+ process. Stakeholders identified as contributors are those involved in funding, sponsoring and provision of technical support to the REDD+ process. Stakeholders in the list categorized under beneficiaries are those benefiting or have the potential to be benefited from the REDD+ process.

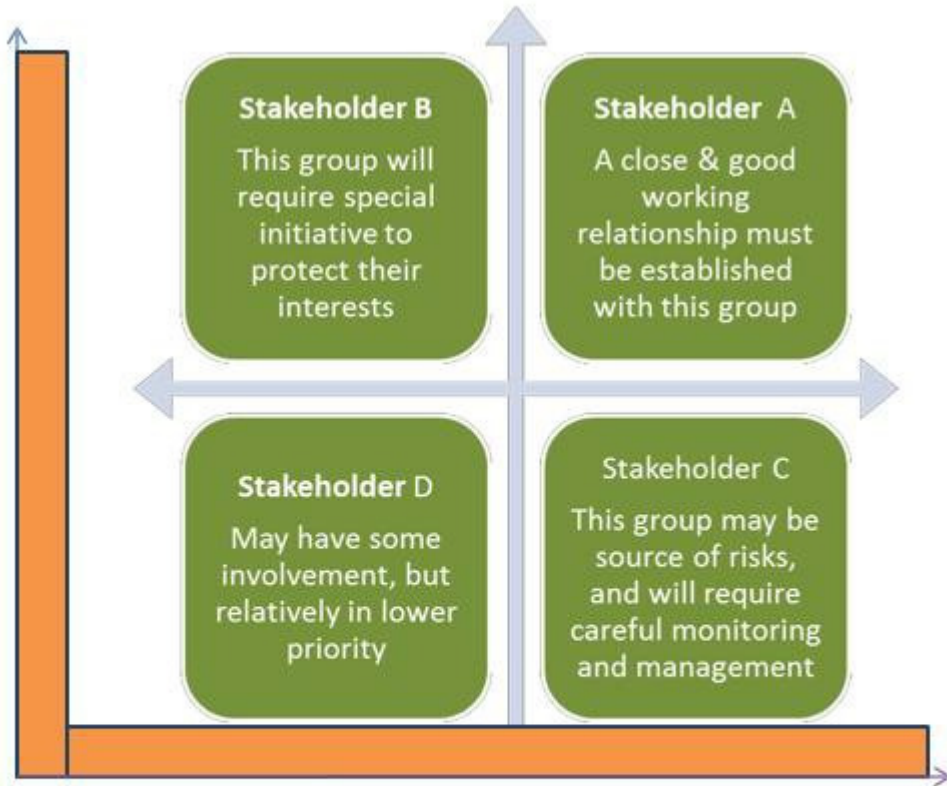
The identified stakeholders are further analyzed and categorized based on degree of influence and importance in REDD+ process and type of stake. Stakeholders who have significant power of influence to determine the direction and outcomes of the REDD+ process are regarded as key stakeholders. Stakeholders that gain benefits from REDD+ or who make direct contribution of resources or services to the REDD+ process are considered as primary stakeholders. Stakeholders that are intermediaries in the REDD+ process and who may make some gain from their involvement are taken as secondary stakeholders. Stakeholders those who may suffer material losses or loss of influence are taken as negatively affected stakeholders.

Table 22-Stakeholder prioritization

Level	Stakeholders	Analysis Based on functional role	Analysis Based on degree and type of stake, & categ
National Level Government Office	Ministry of Environment, Forest and Climate Change	Contributor, implementer and beneficiaries	Primary and key, Category A
	Ministry of Finance & Economic Cooperation	Implementer	Primary , Category C
	Ministry of Agriculture and Natural Resources	Implementer and beneficiary	Primary and Key , Category A
	Ministry of Water, Irrigation and Electricity	Implementer and beneficiary	Primary and Key, Category A
	Ministry of Women, Youth and Children's Affairs	Contributor and beneficiaries	Secondary , Category B
	Ministry of Federal Affairs	Contributor	Secondary , Category D
	Ethiopian Wildlife Conservation Authority (EWCA)	Implementer, and beneficiary	Primary , Category A
	Natural resource and Environmental affairs standing committee	Contributor	Secondary , Category B
	Ethiopia Institute of Biodiversity Conservation (IBC)	Contributor and beneficiary	Secondary, Category B
	Ethiopian Institute Of Agricultural Research (EIAR)	Contributor	Secondary, Category B

	Academia (Addis Ababa University; Hawassa University - Wondo Genet College of Forestry and Natural Resource; Haromaya University; Mekelle University)	Contributor and beneficiary	Secondary , Category B
Regional Level Government Office	OEFFCA, Oromia Forest and Wildlife Enterprise (OFWE) Amhara Forest Enterprise	Implementer, contributor and beneficiary	Primary and key, Category A
	Regional Agriculture and Natural Resources Bureau	Implementer and beneficiary	Primary and key, Category A
	Regional Rural Land Administration and Environmental Protection Bureau	Contributor and beneficiary	Primary, Category A
	Women, Children and Youth affair Bureau	Contributor and beneficiary	Secondary , Category B
	Regional Cooperative promotion Bureau	Contributor	Secondary
Woreda Level Government Office	Woreda Administration	Contributor	Primary and Key , Category A
	Woreda Agriculture office	Implementer and beneficiary	Primary and Key, Category A
	Woreda Land Administration office	Contributor and beneficiary	Primary and Key , Category A
	Women, Children and Youth affair Bureau	Contributor and beneficiary	Primary and Key , Category
	Woreda Cooperative promotion office	Contributor	Primary , Category B
CBOs	Forest Dwellers communities (Edir) NTFP gatherers (bee keeper (Sheka forest), wild fruit collectors Gambella (Vitlaria paradoxa), Hunters, Fishers, Fuel wood collectors, WABUB-, WAJIB	Implementer, contributor and beneficiary	Primary and Key, Negatively affected Category A
International Organizations	Multilateral Development Partners World bank, UN	Contributor	Primary and Key , Category A
	Bilateral Development Partners Embassy of Norway, UK , Ireland, Netherland, DFID, GIZ	Contributor	Primary and Key, Category A

NGOs	SOS Sahel, Farm Africa, Ethio- Wetland, Horn of Africa regional Environment Center and Network (HoAREC&N), World Vision, Environment and Coffee Forest Forum.	Implementer, contributor and beneficiary	Secondary Category B
Religious institutions	Churches, mosque	Contributor	Secondary, Category C
Traditional	Aba Gada, Sinqe-Ayoo (Oromia), Gepitato (Sheko), Edir	Contributor	Secondary, Category B
Associations	Forestry society of Ethiopia, Environmental Society, Biological Society of Ethiopia, Coffee trading association	Contributor and Beneficiary	Secondary, Category D
	Mass media	Contributor	Secondary, Category B



Stakeholder A = Medium - High Importance, Medium - High Influence;
 Stakeholder B= Medium - High Importance, Low - Medium Influence;
 Stakeholder C = Low - Medium Importance, Medium -High Influence;
 Stakeholder D = Low – Medium Importance, Low – Medium Influence

Figure 19-Matrix to show category of identified stakeholders based on their importance and influence

7 Summary of Public Participation and Consultations with Stakeholders in Oromia

Public Consultation was conducted as part of the participatory approach aimed at gaining good knowledge of the social issues/risks associated with the program as perceived by the OFLP operation communities. It was also aimed at exploring and soliciting feedback on the operational steps, land acquisition related issues, compensation, grievance redress mechanism, benefit sharing mechanism, and broader context of implementation arrangements. The consultation was believed to promote community ownership of the OFLP, enhance sustainability and seek their board support for the program implementation in Oromia regional state. Moreover, it provided opportunity for forest dependent communities to make contributions aimed at strengthening the development program while avoiding negative impacts as well as reducing possible conflicts. The consultations will remain open as an ongoing exercise throughout the life span of the OFLP.

7.1 Consultation Approaches

These consultation meetings were facilitated mainly by a team of consultants with ORCU environmental and social safeguard officers. The various consultations in sample Woredas of the Oromia Regional State were conducted from June 1 to July 5 2015. The consultations covered 10 Woredas, 20 kebeles reaching 254 men and 93 Women. Consultations were conducted with stakeholders at different levels, communities in focus group discussions and individual interviews to garner broad community support.

7.2 Summary of Issues and Dates of Community Consultation post October 2015 Appraisal of OFLP

- ***OFLP Consultations (May 2016)***: information on the Program including safeguards was shared with government officials, NGOs, and PFM cooperative representatives (900 people consulted).
- ***OFLP Community Consultations (1-31 August 2016)***: Oromia REDD+ Coordination Unit (ORCU) conducted consultations with forest dependent communities on the overall features of the Program and awareness creation for a total 146,403 people in 49 woredas, 889 kebeles and four zones.
- ***OFLP Benefit Sharing Mechanism Consultation including safeguards instruments (October 2-21 2016)***: the consultation, participation and negotiation with different stakeholders (4627 people), including forest dependent communities, cooperatives and other community based organizations were held.
- ***Consultations on Environmental and Social Review/Due Diligence*** of two ongoing REDD+ Projects [(i) Bale Eco Region REDD Project and (ii) REDD+ Joint Forest Management in the five districts of Ilu Ababora Zone) were held in Oromia from (December 17 to 25, 2016 and from January 22 to- February 3, 2017, 612 people were consulted in 7 woredas and 14 kebeles.) The objective of the study has been to identify gaps between the WBG safeguard policy requirements and the projects and propose mitigation action plans as the projects are associated.
- ***The summary of the minutes of consultations is disclosed in the National REDD+ blog-*** <https://reddplusethiopia.wordpress.com/consultation-and-participation/>

7.3 Community Consultation and Participation focused on three key agendas,

- General discussion and information on concepts, causes, impacts and mitigation options of climate change;
- Drivers of deforestation and forest degradation in Oromia and strategic options to reversing
- A background to the OFLP REDD+ Program including the three program components:
 - i) Enabling Investment: Forest land management activities (Participatory forest management, Plantations and Assisted natural regenerations), Agricultural intensifications, Soil and water conservation, Crop and range land management etc. Sustainable household energy,
 - ii) Enabling Environment: strengthening the state wide policy framework for sustainable landscape management, participatory land use planning, land certification, program management, monitoring, emissions verification, including safeguards.

7.4 General level of awareness and understanding on Climate Change, OFLP and REDD+

- The consultation gauged the level of understanding and sense of climate change process, through identification of key signs in their respective localities. The consultation participants identified, temperature increment, rainfall variability, increasing intensity of droughts, irrespective of the efforts diminishing agricultural productivity, clearly witnessing agro-ecological changes, increasing frequency of flooding and soil erosion.
- During the interactive consultation and discussions, the participants identified the causes for climate change including, deforestation, agricultural expansion, population density, overgrazing and investment.
- Whereas, the impacts covered, diminishing water supply, declining agricultural productivity, flooding and higher risk of drought, health problem, and increasing social tension and conflicts.
- Communities and participants suggested mitigation options of climate change through the OFLP intervention; such as, PFM, watershed management, continued consultation and awareness creation, introducing alternative energy sources, improving livelihoods through agro forestry as prime mechanism.

7.5 General Agreements

- There is a clear understanding by the local community that forest improves rainfall pattern, provides clean air, and contains wild animals, birds and source of biodiversity, while boosting productivity in honey and traditional medicine.
- There is a general understanding that the intervention of OFLP in Oromia regional state will help them sustain natural resources management and biodiversity (flora and fauna) of protected areas as well as increase the forest cover of the region.
- Participants of the consultation provided their broad community support through willingness to participate, and commitment to protect their natural environment and address environmental problems and facilitate the implementation of OFLP.

7.6 Concerns raised during Consultation

- Ever increasing scarcity of land resources for agricultural practices in the region has escalated the problem of encroachment for cultivation, grazing and settlement in and around forested landscapes in the region.
- OFLP, once under implementation, should not follow the historical trend of inadequate public participation in the process of demarcation, zoning and managing of designated government owned regional forests
- Intensive and frequent consultation with local community should be carried out prior to commencing the implementation of OFLP activities considering the prevailing context and challenges (e.g., high population pressures, over grazing, NTFP, Market).
- Parks and protected areas management plans preparation need to involve local communities on demarcation, restriction of access, use and alternative benefits to ensure sustainability and get broad community support
- Forest conservation and management may increase the threat of wild animals attack on the people, crops and livestock.
- Strengthening and proper utilization of local institutions of natural resource access, use and conflict resolution would increase the viability of OFLP and broader national or other regional state REDD+ interventions. This includes the *madda* system (a customary grazing land management system associated with well groups for drinking and livestock), the Gadda (political, governance and conflict resolution institution of the Oromo), the Kobbo (a traditional resource access and management system in South Western Ethiopia), Godaanttu (seasonal pasture, water and shelter access and use management system in South Eastern Ethiopia), **Seqe-Ayoo** (mother sticks) to condemn illegal and non-acceptable, “Sadeta” which helps in conserving the forest by enforcing the traditional rules
- Existing cooperative membership although applauded for the sustainable management of the forest resources of degraded forest and micro climatic modification, concerns were raised related with benefit restriction to members only including cut and carry grasses as well as to pasture their livestock in the forest area, looming to become a major source of conflict.

- Limited carrying capacity of the forest under existing cooperatives such as WAJIB and WABUB may not sustain the increasing population pressure and the growing livestock population of even member communities.
- Community members stressed that lack of sufficient consultation and awareness creation on the basics of PFM with the broader community during the initiation of PFMs is causing conflicts with villagers who are non-PFM members on benefit sharing, use and access right.
- Underserved, vulnerable groups and the landless having impoverished families and small land have little livelihood alternative to support their families.
- GoE mega projects (agricultural expansion, mining and future fertilizer industry) are identified as threats.
- Lack of forest fire management and prevention facilities
- The OFLP intervention might further tighten access and supply of traditional energy sources, (i.e., fuel wood)
- Community members have concerns that OFLP related activities may take land, and/or property and reduce their access to natural resource without proper consultation, engagement and compensation

7.7 Recommendations

- The success of OFLP implementation lies on the due attention given for consultation, participation and engagement of all stakeholders and including local communities. Consultation participants recommended continuous awareness raising programs on drivers of deforestation and forest degradation, watershed management, loss of biodiversity, and consequences of climate change at local level.
- Devising alternative approaches (using income from OFLP to introduce diversified income generation schemes) so as to accommodate the emerging problems of benefit sharing.
- PFMs should support livelihood of the forest dependent community such as promotion of sustainable forest coffee production, diversification of land use through agro-forestry practices.
- Establishment of PFMs should be preceded by continuous community consultation involving the whole forest dependent community, village leaders and community elders and other key persons to increase ownership, inclusiveness, avoid disappointment and ensure sustainability while garnering broad community support.
- Improve the supply and distribution network of improved stoves to the community.
- Improve marketing and value addition of the products in the OFLP intervention area, including coffee, honey and other NTFP
- OFLP enabling investments should consider traditional and modern methods of soil conservation practices in a given district. The traditional method – although not always sustainable -- includes composting, crop rotation, inter-cropping, fallowing, early tillage, contour-plough and hand weeding and among the modern methods: terracing, weed control by chemical and using fertilizer. However, suitable methods have been demonstrated throughout the country including Oromia via the Sustainable Land Management Program and other initiatives. Local soil and water conservation strategies should always be locally defined based on local biophysical conditions; there is no “silver bullet.”

- OFLP success in the enabling investment activities depends on establishing equitable benefit sharing mechanisms learning from already existing PFMs. The process should be participatory, respect for the community ideas such as priorities before engaging in actual implementation
- The Program will use Resettlement Policy Framework (RPF) and Process Framework (PF) for land take and will pay adequate compensation if displacement happens and will provide sustainable livelihood or income generating activities for Project Affected Persons (PAPs)

8 Environmental and Social Situation of Ethiopia

8.1 General Environmental Situation of Ethiopia

The rural environment of Ethiopia reported in good states of condition. Farmlands, lakes, rivers, livestock, forests, woodlands, grasslands, wildlife and open spaces in rural areas are not polluted. The urban environment, however, is characterized by such variables as very high population, high density of housing, crowded market centers and contamination from industrial effluent. Drought amelioration and protection of land degradation are the focuses area of Ethiopia. Though air pollution has become a fairly serious localized problem in Addis Ababa, water pollution as well as domestic and industrial wastes are some of the problems that have resulted from the process of industrial expansion and social transformation taking place in the country.

8.2 Environmental Situation of the Forest Sector of Ethiopia

8.2.1 Historical Forest Management Practices in Ethiopia

Prior to 1889 (Prior to Emperor Menelik Period) - Due to the small population size and limited pressure and competition on the then existing natural resources, mainly the land, it is speculated that there was relatively extensive natural resources.

Emperor Menelik's Period (1889-1913): During the rule of King Menelik, there were great strides in addressing the depletion of forest resources by setting aside "Crown Forest Land" and tapping foreign forestry experts in identifying potential exotic tree species to resolve ongoing fuel wood shortages and to counsel in the creation of a Forest Service Organization. Menelik II is responsible for the introduction of eucalyptus for fuel wood and construction materials and establishing laws that protected important native tree species and forests. He provided incentives for citizens to protect "Menelik Tree" species including *Juniperus*, *Hagenia*, *Podocarpus*, *Cordia*, and *Olea*. Beyond providing incentives for protection he also provided consequences for illegal tree harvesting including property confiscation and in some cases death (Teketay, 2004; Arechiga, 2014).

Land and other environmental resources (e.g. Forest), in this system, were owned hereditarily and can be transferred up to legitimate and rightful inheritance in the blood line.

The southern territories were conquered by and incorporated into the Ethiopian empire by Emperor Menelik. Following the expansion of Emperor Meneilik to the south part of Ethiopia, a new land tenure system, the 'Gult', was established. This system gives the right to loyal followers to own a portion of produces from his land that has been taken from him by the land lords. This exploitation has severely affected the land management system specifically in the southern part of Ethiopia (Hadera, 2002).

After the introduction of Eucalyptus in 1895 to reduce the shortage of construction and fuel wood resources the forest management outlook has significantly improved specifically in the major town of the country.

Emperor Haile Sillassie Period (1931-1974): During the period of Emperor Haile Sillassie, the 'Rist' system was established as a legal and traditional land tenure system in the country particularly in the northern part. However, the land tenure systems in northern and southern part of Ethiopia before the land reform in 1975 were not uniform. In the southern part state and private ownership had emerged. As argued by Dessalegn Rahmato (1994), that there can be significant variation from region to region depending on exactly how the *rist* system operates. As indicated in the study by the

African Development Bank (2002), lately the traditional land tenure system becomes eroded by the growing population pressure and by the increase commercialization of land and land products.

Italian invasion (1936-1941): During the Italian invasion, within the Emperor Haile Silassie period, there were some constructive achievements regarding forest resources development and management (Melaku Bekele, 2003). It was during the Italian occupation that modern forestry activities began in Ethiopia. As noted in Melaku Bekele 2003, the Italians initiated and partly executed a major structural change unprecedented in the country's forestry, in 1937. The administration constituted what they called a **Milizia Forestale** (Forest Militia) with branches in many parts of the country. Milizia Forestale (1937/38) indicates that the overriding forestry policy of the administration was to conserve, develop and utilize the extensive forest resource of the Empire (where the greatest part of the forest was granted to chiefs and dignitaries). The nature of forest property rights under the Italian occupation was not clearly stated.

The report of the Milizia Forestale pointed out that the Ethiopian constitution praxis all forests were considered Crown lands. However it was clear that the Italians directly controlled and exploited the natural forests without much concern about ownership. They also issued various forestry legislations that were produced in the sense of the invaders profit. Forest maps were produced and estimation of forest areas (the first of its kind) were also conducted including future plan and prospects of forest development for different regions was produced (Melaku Bekele, 2003).

After the return of Emperor Haile Selassie, the Ethiopian parliament passed three forestry laws in 1965 namely, State Forest Proclamation No. 225, Private Forest Conservation Proclamation No 226 and Protective Forest Proclamation No. 227. The main rationale behind the legislation was the conservation of the soil, preservation of fertility and beauty of the country.

During the Derg Regime (1974- 199): Derg had introduced a land reform proclamation of 1975, known as "Land to Tiller", ended the old feudal land system of the imperial regime and abolished the various forms of tenure in the country. As briefly described in the study by Amogne Asfaw (2013), Derg proclaimed a new law called Forest and Wildlife Conservation and Development Proclamation No. 192/1980. The regime, according to Yeraswork Admassie (2001), used natural forest resources as spring boards for plantations that outwardly expanded at the expense of peasant holdings in the course of time, which can be described as not participatory. Afforestation thus posed a threat to many peasants because it encroached on farmland, evicted households living in or near it, and took away lands that were common properties and had economic, social or cultural value. Later on, Derg applied mass mobilization and forced labor campaigns to rehabilitate degraded lands with vegetation and area closure schemes were designed. Such areas were frequently employed for grazing by the community because alternative sources of pasture were not provided (Dessalegn Rahmato, 2001).

As explained by Million Bekele (2011), plantation forests during that time were mainly for commercial timber for sawn lumber and poles as well as non-industrial plantations like fuel wood and construction timber. State environmentalism during the Derg era, as argued by Dessalegn Rahmato, (2001), had placed high emphasis on government control of environmental assets on one hand, and the protection of such assets by restricting or prohibiting their utilization by the surrounding community on the other hand. Though great initiatives had been taken by the regime to expand the country's forest resource base, in general the forest management system during the Derg period can be considered as protectionist in type.

The EPRDF Period (1991–Current):

The 1995 Constitution of Ethiopia enabled the country manage the forest resource at different administrative tiers. The reform enabled the involvement of non-state actors, including community-based institutions and NGOs into forest governance while the federal government remained mandated to set standards and policy frameworks on affairs concerning environmental and natural resource management. Article 51, sub-article 5 of the 1995 constitution particularly vested the power to enact laws for the utilization and conservation of land and other natural resources, including forestry, to the Federal government.

Since 1991, several policies and strategies were designed and issued to increase agricultural productivity but little has been done with regard to forest. The Rural Development Policy and Strategy (RDPS) document drafted in mid-1990s and issued in 2001 on agricultural and rural development undermined forest and is conceptualized as an agro-forestry intervention where trees are grown on agricultural lands to ameliorate soil fertility and thereby boost crop production or to serve as livestock feeds (Alemayehu Negassa, 2014).

The CRGE of Ethiopia recognizes the economic and ecosystem value and function of the forest and simultaneously states it is under threat due to agricultural land expansion, degradation from fuel wood consumption and logging and hence, called for intervention (CRGE, 2011). As a result, forestry has become one of the pillars of the CRGE strategy. New institute, MEF (now MEFCC), is established to harness problems that to do with forest with forest as a resource to avert climate change and become a means of livelihood for the million poor of the country.

8.2.2. Main Environmental Issues of the Forest Sector

The main environmental issues of the forest sector of the country such as agricultural investment, forest coffee management and forest degradation, enset plantation, mining and deforestation, overgrazing and climate change are described below.

8.2.2.1. Agricultural investment in forest areas

Recently both the government and private investors engaged in mechanized agriculture to produce sugar and food crops to the foreign markets. The government invests on large scale sugarcane plantation in different parts of the country. One of these is the Kuraz Sugar Project in South Omo, where the lager plot of forest and woodlands cleared for sugar cane plantation, establishment of factories and living quarters. The agricultural investment takes place dominantly in Gambella, Benishangul- Gumuz and the SNNPR. A large plot of forest covered land is allocated to the private investors in Masha and Decha Woredas for corporate coffee and tea production and a huge plot of land in Gambela region in Godere and other Woredas is awarded to foreign and domestic companies that engaged in food crop production to export to the international markets. Furthermore, in Oromia region Yayu forest area potash mining and Gold mining in Shakiso area are practiced even though it is not part of agricultural investment. As observations from the field indicate investment is causing a tremendous impact on the forests and environment in general. As the stakeholder, discussion showed in the Omo valley, despite the opposition of environmentalists and conservationists a large portion of forest land which belonged to part of the national park around Omorate is allocated and awarded to a foreign private investor for cotton production. Such cases also indicate the lack of coordination and synergy among different stakeholders and sectors, thus contributes to the process of deforestation.

8.2.2.2. Forest Coffee Management and Forest degradation

One of the major causes of forest degradation in Ethiopia is forest coffee management. Coffee plantations in natural forest and management of naturally growing coffee has reduced the forest density and species diversity. In the coffee forest, only old trees of shade value are maintained which eventually endangers the functions of the shade value. This is true mainly because at some point in time a significant portion of the shade trees could be lost due to their old age. Moreover, the intensive coffee management under the shade trees and coffee shrubs during coffee harvesting periods heavily affects tree seedlings that could serve as future shade trees. The traditional selective cuttings of some trees species which the farmers believe to reduce coffee harvests also affect the stock and density of shade trees. The intensive coffee trees management and selective tree cuttings in the coffee forests will eventually put at risk the existence of *Coffea arabica* and its gene resource from Ethiopia coffee forests from which it has originally been discovered. The impact of the intensive coffee forest management is being observed in some places. These days, Albizia and Sesbania tree species are replacing the rich biodiversity of the Western and South astern forests of Ethiopia. REDD+ projects as rescuer of the forest and forest biodiversity need to avert the situation through offering economic incentives to the community equivalent to the benefit the communities are getting from the coffee they managed in the natural forest so that the coffee farmers allow the undergrowth and maintain future shade trees.

8.2.2.3. Enset (*Ensete ventricosum*) Plantations in the Forest

While the high forests of Ethiopia are suffering from the encroachment of coffee plantation, the forest in the South forests (Borana) are additionally suffering from the traditional Enset planting practices. Enset is a staple food in most parts of the Southern Nations Nationalities and People Regional State (SNNPRS) and Borana zone of Oromia forest communities. The plant is taking large parts of the forest just like coffee forests in the south west. However, unlike the coffee forest Enset plantations do not maintain trees. The total clearing of natural forest to establish Enset plantations is contributing to both deforestation and forest degradation mainly in the two regions.

8.2.2.4. Mining and Deforestations

Ethiopia is said to have high potential reserve for mineral resources though only few of them are underutilization currently. Unfortunately, those explored so far are found in forest areas. Laga- Dembi gold and tantalum as well as Yayu coal and potash mining are the biggest mineral resource reserve of the country found buried under the forest of the country. Yayu forest is recognized and registered by UNESCO as a World Heritage site where coal and potash are going to be mined soon. Yayu forest is also the home of the wild *Coffea arabica* which the country boasts of as the origin of gift to the World. There are also other small and medium scale mining operations in Gambella and Benishangul-Gumuz regions. Though mining is carried in the forest and will be launched to be in Yayu Forest, information on the coverage of the mining operations and scale of deforestation are not available or are scanty. Concern about mining impacts on forest resources is high.

8.2.2.5. Invasive Alien Species (IAS)

Invasive alien species or non-native species have been introduced both accidentally and intentionally. Intentional introductions could be due to economic, environmental and social motivation. Ethiopia has long history of introducing alien species of plants. IAS are of great concern in Ethiopia as they are affecting biodiversity and occupying agricultural lands, rangelands, national parks, water ways, lakes, rivers, power reservoirs, roadsides and urban green spaces with great economic and ecological

consequences. The reported IAS in Ethiopia are *parthenium* weed (*Parthenium hysterophorus*), prosopis (*Prosopis juliflora*), water hyacinth (*Eichhornia crassipes*), cactus (*Euphorbia stricta*) and lantana weed (*Lantana camara*).

8.2.2.6. Smallholder Agriculture

Over 95 % of the farming households in Ethiopia are subsistence farmers and production is challenged by declining soil fertility, lack of inputs and crop pests. As a result, extensive agriculture is the alternative to cope with declining land productivity. Marginal lands with steep slopes, critical forest ecosystems and important catchments of watersheds are being converted to cultivation by small scale farmers. Expansion of small-scale agriculture is also one of the major driver of deforestation and forest degradation next to fuel wood extraction. In the forest regions of the southwest of the country, small scale farm households respond to declining land productivity by abandoning existing degraded cropland and moving to new lands for cultivation, transforming the forest landscapes into mosaics of patches of farmland and forest ecosystems, resulting in habitat loss and fragmentation for many species of flora and fauna. Legal and illegal migrants, landless youth and unemployed urban youth exert claim land from the remaining forest lands and exert significant pressure on remaining forest resources.

8.2.2.7. Overgrazing

Ethiopia has the largest livestock population in Africa. Because of its favorable climate, 80 per cent of the livestock are found in the highlands while the balance form an integral part of the lowland livelihoods system of the community. Livestock are critically important asset of the pastoral and semi-pastoral communities in the lowland areas. Maintaining of large size of livestock is a pride and sign of wealth indicator. Livestock provide milk and meat, draught power and manure for crop production. Maintaining of large size of livestock adversely affects the forests through soil compaction and preventing undergrowth from the soil seed bank and damaging of newly emerged samplings. The browsing behaviors of some animals (such as camel and goat) retards trees to attain their natural size to give their ecological functions in addition to preventing seed setting to ensure the perpetuity of the species. REDD+ project should focus on enabling the community maintain few number of high productive livestock and improving of the fodder availability.

8.2.2.8. Fuel Wood Extraction and Charcoal production

Fuel wood and charcoal are important sources of energy for cooking for significant proportion of the population in urban and rural areas. Over 90 % of the household energy source is biomass including other types such as crop residues and cow dung. In addition, poor farm households along major roads and highways in rural areas of the forest regions are dependent on incomes from sale of fuel wood and charcoal. Therefore, uncontrolled extraction of fuel wood and charcoal production are critical problems in the forestry sector. Although there are legally recognized charcoal producers associations, and also private businesses exporting charcoal to foreign markets, there is very little control on the source of the charcoal. Often, the open forest resources fall victim of such "legal" excuses for destruction they cause in the woodlands and high forests.

8.2.2.9. Climate Change

Ethiopia is one of the most vulnerable countries to the impacts of climate change. Past records show that the temperature has been rising in the past fifty years by about 0.40C every 10 years. The general model predictions also show that the average temperature will rise by about 10C in the next 15 years and by about 20C in the next 35 years. The average annual rainfall is expected to increase by about 4.5 % in the next 15 years and by about 14 % in the next 35 years. The highland regions will generally experience a drop in rainfall and rise in temperature. The rise in temperature will reduce the annual base flow of rivers and will harm the water supply for power generation and agricultural production. The long cycle crops in the highland regions will not get sufficient moisture in the short rainy season and will have to be replaced by other varieties. The impact on human health due to the changing of ecological ranges and climatic variables for vector borne diseases, on biodiversity loss due to habitat change and on hydrological system due to the change on water balance of the critical catchments are imminent. However, the country has designed policy responses at strategic levels by preparing sector based adaptation strategies and resilient economic development paths.

8.2.2.10. Pollution

Environmental pollution is a serious issue in Ethiopia. Urban wastes (solid and liquid) are poorly managed and the regulatory systems are malfunctional. Surface water pollution, especially streams and open water bodies (reservoirs and lakes), are poorly regulated and managed. As a result they are sources of human and livestock illnesses in the down-stream areas. Industrial effluents from tanneries, processing factories and oil depots are directly released to streams. In the rural areas, although relatively better in terms of pollution due to solid wastes, there are areas critically affected by chemical pollution from agricultural operations such as the floriculture farms. The industry has been long criticized for not being open on the handling and management of agro-chemicals and pesticides they use. Agro-chemicals used by small scale farmers are also not properly regulated and sometimes they also become threats to human health due to mis- handling. Surface and ground water pollution are results of such chemicals applied in agricultural fields.

8.2.2.11. Urbanization

Rapid and unplanned urbanization, commercial development are the typical characteristics of developing countries. In Ethiopia, there is high population migration from the rural to urban and settlements in small towns. The small towns are usually expanding into the nearby towns. Addis Ababa, Jimma, Bonga, Holota, Dolomena and many others are towns cited as an example in this regard. Other than serving for expansion area for urbans, forests primarily serve as energy either as wood or charcoal. In urban located near forest areas, the livelihoods of poor people depends on

forest and forest products. Unplanned urbanizations have generally caused forest depletion in Ethiopia during the last century.

8.2.2.12. Forest Fire

Forest fires are becoming common in the high forest areas. Earlier, wild fires are natural adaptation mechanisms for the woodlands and bush land ecosystems in the dry lowlands and the Rift Valley. Since the last few decades, fires cause vast destruction of forests in dry afro-montane high forest areas, especially in the Southeastern part of the country. Such fires that occurred in the destroyed large areas of forests in the Southeastern highlands of the Oromia region. Usually, openings made by fire are followed by illegal settlements and farming in the heart of the forests. Although there are no actual data, the annual estimates of forest lands devastated by fire are in several hundreds of hectares. The woodlands and shrub lands are adapted to fires and the damage is often reversible. However, in some areas of the lowlands, fires are used as land clearing tools for cultivation, especially in small scale and large scale farming areas of the highlands and lowlands, respectively. Often, human caused fires happen due to illegal hunting, honey harvesting, farm land clearing, for rangeland bush control or initiation of new pasture/grass.

8.2.2.13. Infrastructure

There were roads constructed that pass through the forests (e.g. Harena, Masha, and Gerjeda and many other forests) but there are no systematically recorded data on the extent and types of forest affected by these road constructions.

The National Growth and Transformation Plan (GTP) of the country contains plan to construct hydro-dams. Some of the hydro-dams are located in lowland and woodland areas that may pose risks on woodlands. Absence of watershed management in the hydro-dam areas will affect the hydro-dam through silt accumulation that may jeopardize the function of their function.

High tension electric power transmission line and access road for the maintenance of the line pass through the forest in some cases (e.g. Ethio-Kenya high tension power line). The installation of the line needs approximate width of line corridor of 65m (right of way) while the access road construction needs 5m width. The installation of the line and construction of the access road clears considerable hectareage of forests. REDD+ Secretariat needs to establish synergy with the Ethiopian Road Authority and Ethiopian Electric Power Corporation to avoid environmental impacts through good alignment away from the forest and capturing of important forest data in case deforestation is inevitable due to absence of better road alignment options.

8.3. General Social Situation of Ethiopia

8.3.1 Social sustainability and development

The 1995 Constitution of Ethiopia declared principles of the GoE is revolutionary democracy, which is based on the twin pillars: respect for diverse collective identities (nationalities); and for individual rights (citizens). Under the Constitution, the GoE guarantees equitable access by all Ethiopian people to public goods and services. The constitution articles 14, 29, 31, 35, 39, 40, 41, 43 provide the core principles and frameworks for subsequent proclamations on issues related with social development. These principles and provisions are summarized below, where the details could be referred from the FDRE constitution attached with this report or could be accessed online.

- ***Social Development***

- 1) Provides economic, social and cultural rights in engaging freely in economic activities, choose livelihoods, create and expand job opportunities for the unemployed including to find gainful employment,
- 2) Ensure improved living standards and sustainable development to the nations, nationalities and peoples of Ethiopia,
- 3) Ensures Ethiopians have the right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nation/s, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange,
- 4) Every person has the inviolable and inalienable right to life, the security of person and liberty.

- ***Social Inclusion***

- 1) Equal access to public social services, with FDRE obligation to allocate resources to provide to the public health, education and other social services,
- 2) Vulnerable groups support and assistance encompass the physically and mentally disabled, the aged, and to children who are left without parent or guardian,
- 3) Ensure Ethiopian farmers and pastoralists receive fair prices for their products, obtain an equitable share of the national wealth commensurate with their contribution,
- 4) Ensure equal rights to women in marriage, harmful customs, eliminate inequality and discrimination provision of affirmative measures in political, social and economic life as well as in public and private institution,
- 5) Nations, Nationalities and Peoples”, defined as “a group of people who have or share a large measure of common culture or similar customs, mutual intelligibility of language, belief in a common or related identities, a common psychological make-up, and who inhabit an identifiable, predominantly contiguous territory. The Constitution recognizes their right to self-determination, including the right to secession; speak, write and develop their own languages; express, develop and promote their cultures; preserve their history; and, self-government (including the right to establish institutions of government in the territory that they inhabit and equitable representation in state and federal governments).

- ***Social sustainability, community consultation and participation***

- 1) Ensure participation and meaningful consultation of the nations, nationalities and peoples of Ethiopia to enhance the capacity of citizens for development and to meet their basic needs,
- 2) Ensure equal opportunities and participation for women with historical disadvantages such as property use, ownership and inheritance, employment, payment,
- 3) The constitution provides the right to hold opinions without interference to seek, receive and impart information and ideas and freedom of association for any cause or purpose,
- 4) Protect and preserve historical and cultural legacies, and contribute to the promotion of the arts and sport,

- ***Gender participation and inclusive development***

- 1) The FDRE constitution article 34 and 35 states about the participation of women in leadership and committees to women empowerment enhance communication skills; develop the skills of stress management.
- 2) The GoE committed to end a historical legacy of inequality and discrimination of women while ensuring participation of women in equality with men in all economic and social development endeavors. It also introduced different packages of affirmative measures (special attention to enable them compete and participate equally (political, social and economic life, public and private institutions). As the supreme law of the land the constitution provided participation of the people (men and women) in national development policies and programs.
- 3) Therefore, participation of women in REDD+/OFLP initiatives is a constitutional and human right, development right in establishing a socially and culturally inclusive sustainable.

Various proclamations on labor, occupational safety and health, education, health, roads and policies on environment, population, health, education provided broad areas of social development legal frameworks in Ethiopia.

8.3.2. Social Development Policy of Ethiopia

The national social policy has been issued in 1994 and it was revised again in 1996 with a change in its developmental aspects by the Ministry of Labor and Social Affairs. This policy recognized and upheld that social problems are direct results of misguided policies adopted by the previous regimes. All segments of society were negatively affected by those misguided policies but most importantly, children, youth, women, the elderly, and persons with disability were the most vulnerable.

The policy has laid out its implementation strategies to achieve the above listed objectives. These include community participation, working in partnership and coordination, research, capacity building, advocacy and awareness raising, promoting gender equality, enacting social related laws, institutional arrangements and others. In this regards, the policy is comprehensive enough to guide the social development endeavors.

Given the provisions of the constitution on underserved groups owing to their limited access to socioeconomic development and underserved status over the decades, the Ethiopian government has designated four of the country's regions, namely: Afar, Somali, BenishangulGumuz, and Gambella as Developing Regional States (DRS). In this respect, Article 89(2) of the Ethiopian Constitution stipulates: 'The Government has the obligation to ensure that all Ethiopians get equal opportunity to improve their economic situations and promote equitable distribution of wealth among them'. Article 89(4) in particular states: 'Nations, Nationalities and Peoples least advantaged in economic and social development shall receive special assistance'.

The GoE Social Protection Policy (2014) focused on protecting the rights and interests of people susceptible to social risks and vulnerabilities by addressing power imbalances and structural causes that perpetuate economic inequality and social exclusion. This will help the GoE to promote social dialogue in the society which will be supported by budget allocation and legal framework leading to social justice. The term "vulnerable groups" refers to a distinct, social and cultural group possessing the unique characteristics in varying degrees.

Basic principles regarding vulnerable peoples are stated in many of the GoE constitution and various proclamations, where the most comprehensive one is the National Social Protection Policy. The policy actions identified vulnerable groups encompassing vulnerable pregnant and lactating women, children, the elderly, persons with disabilities, labor constrained individuals and households, the unemployed, those exposed to natural and manmade calamities, persons living with or directly affected by HIV and AIDS and other chronic debilitating diseases, victims of social problems such as drug users, beggars, victims of human trafficking and commercial sex workers and people with difficulties in accessing basic social services.

Parallel developments along with the National Social Protection policy is the training of Community level social service workers, led by Ministry of Labor and Social Affairs, through the Social Welfare Workforce Development Taskforce. Since its launch in 2014, the implementing partner Ethiopian Society of Sociologists, Social Workers and Anthropologists through strengthening Public Sector Social Service has trained over 2500 diploma (TVET-level-IV) social service workers in Oromia (680), Amhara (820), SNNP (377), Dire Dawa (61) and Addis Ababa City Administration (67). These are community level social service cadres employed by the respective regional governments to facilitate the success of the National Social Protection Policy.

Oromia regional State as a pioneer in establishing the Community Service Workers training center, so far has the largest grass roots presence with over 1300 trainees in all Woredas of the regional state. These group of Community Social Service Workers will be used to explore issues related with underserved and vulnerable groups identified in the OFLP social assessment. It has also five different institutional care centers in different parts of the region, which cater services for the needy, particularly for those with disability, orphans and the elderly. Even though the effort of the bureau for the last 10 or more years is improving in terms of institutional capacity, it is not adequate to address the growing social problems in the region.

Similarly, the Addis Ababa City Administration has been trying its level best to address social problems in the city in various ways. The city administration (which Labor and Social Affairs Bureau embraces Social and NGO Affairs Office, Labor Affairs Office, Youth and Sports Commission,

Women Affairs Office, and Cooperatives Promotion Office) is engaged in the provision of basic social services.

The activities of the bureau are very much constrained by limitation of budget and qualified human resources to address the ever growing social problems in the city. Other than the government structure, there are also various NGOs, FBOs and CBOs working on social development throughout the country. In fact, the social development practices of these organizations have been increasing following the recurrent drought and famine in some parts of Ethiopia particularly in the 1970's through international and local relief programs. Some of the organizations involved in social development activities have tried to establish good working relationships with the community members, community leaders and traditional institutions such as *Edirs*. The level of Involvement and participation of the community in all aspects of the social development programs is, however, very low.

Their scope of coverage to reduce the existing acute social development problems of the urban community is also very limited. Though there are some efforts by the government in most urban centers of the country, the existing practical interventions in mitigating the apparent social problems is mainly left for the non-governmental organizations. The practical involvement of the existing public organizations and municipalities has been very much limited to facilitating the role- played by other donor organizations, and local and international NGOs. The public institutions usually known as Social Affairs Departments in the urban centers have poor institutional capacity at all levels.

8.3.3. Gender Issues

More than half of the Ethiopian population comprises women who are not only reproducers but also producers of wealth. They engage in economic activities from cultivation to petty trading and from animal husbandry to shifting cultivation, in addition to the unpaid labor they spend on making the households. Despite the multifaceted contributions of women in terms of economic, social and human life, they are the oppressed and exploited social group of the Ethiopian society, due to the traditional view and social values towards women. They are denied equal access and opportunities as their men counterparts, in economic, political and social aspects of life, as inequality is structured in the very society in which they are part of it.

Despite efforts to ensure gender equality, the field observations in different regions of the Country and from the discussions with stakeholders indicate the gender issues still remain critical that need engagement and commitments of the government, stakeholders and the society at large. The gender inequality in terms of land ownership and access to resources, land tenure systems, education, extension and health is still intact and contributed to low productivity in different sectors and a high level of poverty. The field assessments from Wondogent, Arbaminch Zuria and other sample Woredas indicated the low level of participation of women in watershed management which could be related to the gender inequality in the society.

8.4. Forest Related Social Situation in Ethiopia

8.4.2. Key Social Issues in the Forest Sector

A key social issue is the relationship between people and forests which is marked in various ways:

- Forest areas are the base of the livelihoods of people who have adopted agriculture and livestock-raising as their primary livelihood strategy. Given this, the way they interact with forests has a major influence on their level of poverty
- Forest-dependent communities face considerable issues concerning their rights to access forest areas and use forest resources
- Both formal and informal social institutions have been established for forest management
- There are numerous examples of grievances that are related to forest-based issues
- The forestry sector plays a key role in the social development of communities.

In addressing the people-forest relationship, the status of people – whether they are locals or new comers or from a particular ethnic group, and gender concerns are important to consider.

8.4.3. Forests and Livelihoods in Ethiopia

Livelihood can be thought of as the way people make a living. Income generation opportunities contribute to human well-being, which includes tangibles as assets and goods for consumption. According to Chambers and Conway (1992) livelihood comprises capabilities, assets (both material social resources) and activities required for a means of living. A livelihood is sustainable when it cope with and recover from shocks and stresses, and maintain or enhance its capabilities and assets, both now and in the future, while not undermining the natural resource base. According to the livelihood framework described by the UK Department of International Development (DFID), there are five types of capital that support livelihoods which includes: 1. Natural capital (such as lands, water, forest and fisheries); 2. Human capital (such as knowledge and skill); 3. Financial capital (such as income opportunities); 4. Physical capital (such as infrastructures), and 5. social capital (such as social networks).

Essentially, livelihood holds a central place to human survival and comprise of opportunities for sustainable living. The pursuit of livelihood strategies however, depends on the tangible and intangible assets at the disposition of the people either as possessions or accessibility. These types of capital form the concept of sustainable livelihoods, since they empower the rural poor people in local decision-making and enhancing security, reducing their vulnerability to shocks and increasing their capacity to recover from them.

A range of assets is needed to achieve positive livelihood outcomes; no single category of assets sufficiently provides all the many and varied livelihood outcomes that people seek. The long-term contribution of forest resource to the livelihood strategies of the rural poor had long been appreciated as significant (Levang et al., 2005). Forest resources are a safety net to improve livelihoods and quality of life as one of many strategies to avoid falling into destitution (Shimizu, 2006). Wood is the primary energy source for at least 90% of households in Ethiopia (CIFOR, 2005).

Forests may also fulfill many ecological functions that are vital to the livelihoods of the rural people; for example, they provide habitat for animals and plants and help in water and soil conservation, which are indispensable to the livelihoods of the people. Furthermore, the multi-functional nature of forests means that they can support and sustain local livelihoods, as well as alleviate poverty in a variety of ways, and also support the country's economic, social, cultural and

environmental development especially in rural areas.

Natural and planted forests contribute to provide a range of goods, such as wild game, fruits, traditional medicines which can improve health, income from the sales of forest products (such as woods, medicinal herbs, gums, latex, resins and spices), financial capital that can be used as working capital for trading activities. Forest foods and incomes from forest products sustain households over seasonal and unforeseen shortfalls, or provide lump sums for paying off debts. Forest incomes are a vital economic buffer, particularly for women, children and the poorest households and the entire community during periods of stress (such as seasonal shortages, and crop failures) in rural Ethiopia where there are forests. Forests also provide essential environmental services, whose loss often disproportionately afflicts the livelihoods of the rural poor, who have fewer alternatives. Moreover, the contribution of forests is measured not only by the products they provide, but also by the non-tangible services they offer (Warner, 2000). According to Arnold (2001) the role of forests and trees in poverty alleviation is multidimensional. For forest dependent community, the forest forms a dominant part of their physical, material, economic and spiritual lives, but its importance is often undervalued.

The forest, as well as providing a wealth of material outputs of subsistence or commercial value, is the basis for livelihood systems based on hunting gathering, or of rotational agriculture systems that depends on the ability of bush fallow to revive the productivity of the land. The forest thus constitutes an integral part of the habitat and of the social and cultural structure of those living within it. However, rather than only evaluating the importance of forest resources based on the number of people depending on them, it is even more important to understand the dependency relationships and its dynamics.

The contribution of forests to sustainable livelihoods defines forests to include all resources that can produce forest products. These comprise woodland, scrubland, bush and trees on farm, as well as forests. This definition focuses not on tenure or tree cover as the basis for defining a forest, but on the potential for producing products. Moreover, the contribution of forests is measured not only by the products they provide, but also by the non-tangible services they offer (Warner, 2000).

8.4.4. Women Entitlement to Land and Forest Resources

The land reform proclamation of 1975 abolished the various forms of tenure in the country. The military government “Derg” from 1974- 1991 introduced a land reform proclamation, known as “Land to the Tiller”, which abolished the land tenure system of the imperial regime. Without any discrimination of the sexes, the 1975 land reform proclamation declared that any person who is willing to personally cultivate land shall be allotted rural land sufficient for his/her maintenance and that of his/her family. However, in his analysis Hadera (2002) has pointed out that the proclamation essentially allocated land only to those who were able to till it and totally denied the rights of children, the elderly, and those women who were unable to plough land due to cultural constraints with the common view that women must not till.

The proclamation gave equal property and land ownership rights to both men and women. However as the land distribution was on the basis of family household head, and as the majority of households are traditionally headed by male, the 1975 land reform significantly affects women's access to land and control over land through ownership. By using the household as the unit of allocation, the proclamation assumed the households were uniform and thus failed to take intra-household distribution relations into account (Hadera, 2002). Besides being gender biased and discriminatory towards women, it also noted that women in cultures where polygamy was exercised were negatively affected since they were treated as part of a single family headed by their single husband. Critiques have indicated that the 1975 public ownership of rural land Proclamation lack clarity when it comes to the rights of women to land use. It has been emphasized that the proclamation did not put the rights of women to land use in proper perspective, that is, it does not give women direct possessor right to land use. Therefore, women's benefit from the land has been limited and indirect.

The incumbent government, the Federal Democratic Republic of Ethiopia (FDRE), declared that all land including natural resources is the common property of the nations, nationalities and peoples of Ethiopia and shall not be subject to sale or to other means of exchange and individuals shall have only usufruct right (Article (40)).

Although the FDRE government has maintained the mixed economy policy of the Derg (March 1990) however, it formulated articles that can address women's rights. In general, there are much better visible articles that address women issues compared with the last two regimes (the imperial and Derg) in Ethiopia, even though its implementation on the ground was insignificant.

Regarding women's rights to land, the 1995 Constitution article (35) envisaged that:

- Women shall, in the enjoyment of rights and protections provided for by this Constitution, have equal right with men
- Women have equal rights with men in marriage as prescribed by this Constitution.
- The state shall enforce the right of women to eliminate the influences of harmful customs. Laws, customs and practices that oppress or cause bodily or mental harm to women are prohibited.
- Women have the right to acquire, administer, control, use and transfer property. In particular, they have equal rights with men with respect to use, transfer, administration and control of land. They shall also enjoy equal treatment in the inheritance of the property.
- Women shall have a right to equality in employment, promotion, pay and the transfer of pension entitlements

However, as Ethiopia is a country with a rich variety of traditions, norms and practices of ownership, although the legislation has affirmed women's basic right to land, resources and employment, the customary and religious practices and laws limit women's access to various resources and employment than men for legal and cultural reasons that may vary from tradition to tradition and from place to place. For example, in the Oromia and Southern Nations, Nationalities and Peoples' Regional State (SNNPRS), customary law prohibits women from inheriting land.

The Ethiopian Constitution (Article 35) confirmed that men and women have equal rights to acquire, administer, control, use and transfer property, and more specifically they gave equal rights

with men with respect to the use, transfer, administration and control of land. The Ethiopian action plan describes that:

“The national constitution has been developed to protect the fundamental rights of women, their interest of access and control over resources, and equality among women and men in marriage. It recognizes the history of inequality and discrimination women suffered in Ethiopia. Ethiopian women are entitled to remedial and affirmative measures to enable them to compete and participate on the basis of equality with men in political, economic and social life.”

Although the National Policy of Women is necessary to achieve gender equity and equality, it is not sufficient enough to empower women in the development programmes since inadequate efforts have been made for its implementation. Much has been done about the National Policy of Women formulation but what remains is the institutional set-up, most important of which is its effective and efficient implementation. It is being realized that implementation of the Women’s Policy is extremely challenging in Ethiopia. The Ethiopian National Action Plan emphasizes that despite the fact of the political commitment, legal support and institutional arrangements, the bureaucratic resistance to accept the gender experts as equal partners and gender equitable integration of women as subject of public policy, has made it more difficult to perform effectively because of the traditional set-up of the society and thinking.

Generally, the up-to date implementation of the National Policy of Women (1993) indicates that though it was a major step to achieve gender equity and equality, it is so far from the practice of gender mainstreaming in the different institutions. Therefore, policy-makers must go beyond legal and formal rights to understand the complex way that women get access to decision-making, resource management and development, education, employment and the likes.

8.4.5. Women involvement in the forestry education

Until recently the enrollment of women in the forest academy or else is so low due to the socio-cultural factors that hindered the equal access and opportunities to education. However, on the bases of some thirty years experiences, those women who graduated from the forest academy had equal employment opportunities in the forest sectors having equal amount of salaries/payments as men counterparts. The new women’s policy that has been implemented recently promotes the representation of women through affirmative actions. However, due to the organizational, cultural and value setups women forest professionals are less recognized and have lower chances to be appointed in higher positions as forest officials and managers even though they have the same levels of qualification with men. Thus, their opportunities for promotion and further education and training are insignificant and women forest professionals are under organizational and structural domination of men, in terms of their numbers and positions. Their mobility to the higher positions could be hindered by the low level of education and lack of information together with the double burden they carry as mothers and makers of home. To enhance women professionals to the higher leadership and managerial positions capacity building and professional developments are important and would promote gender balance in the forest sector.

8.4.6. Gender and REDD+: Issues for consideration

What opportunities are there under the REDD+ implementation programs that would benefit women from poverty reduction perspectives? What kind of attractive financial compensation mechanisms are there to support women (e.g. addressing their energy self-sufficiency)? What are gendered opportunities, challenges and implications of REDD+ projects? How can the benefit sharing mechanism be made equitable avoiding gender biases? What are the gender dimensions and impacts? Questions like these and others have to be clearly addressed in documents like this to give the end users, an overview of their responsibilities and opportunities so that women can get their maximum benefit out of REDD+ projects in their respective area.

Accordingly, in Ethiopia, agricultural expansion and demand for fuel wood are considered by the government as the two major causes for the high rate of deforestation. The REDD+ principles and projects in this respect include achieving a major transition in the agricultural sector, including rapidly transforming prevailing subsistence practices into commercial plantations and putting the blame for driving deforestation and climate change on the poor rural agrarian slash and burn subsistence farmers (men and women) who are struggling to survive with small land per household.

Large scale plantation has also been sought to address drives of deforestation in countries like Ethiopia. However, the gender findings show that large scale plantations mostly offer jobs to men while the few opportunities open to women reinforce their role in services considered as inferior and less visible. Tasks developed by women are almost insignificant and they may only work as cooks; women have health problems due to chemical products. When men leave to work in the eucalyptus plantations women usually become overburdened as they have to take care of the family and deal with traditional household chores without help. The women and the family are alone for a longer time and need also to assume the tasks in the farm.

To clarify the legal ownership and carbon rights, any REDD+ program will be premised upon the exchange of rights, likely in the form of area of forest/volume of trees preserved, for a credit. This exchange can only be accomplished by an individual or institution with rights to the carbon. Then, who has the right to carbon is who owns the land and trees in land. With women' lack of tenure rights (only access and usage and small land in many cases degraded land) in many African countries including Ethiopia, it is misleading for women to see REDD+ and the carbon market as an opportunity. In general, according to Solagne (2015) the following points can serve as guides for gender consideration in REDD+ implementation:

- Design a gender sensitive strategy on REDD+ and CDM in Ethiopia.
- Put in place gender focused policies in addressing drivers of deforestation
- Design equitable benefit sharing for men and women in REDD+ initiatives
- Ensure legal recognition of tenure rights for men and women
- Gendered participation and representation in decision making in REDD+ program
- Put in place gender safeguards
- Go beyond funding and need for equitable forest governance and socially oriented REDD+ that consider gender equity and equality as part of the core principles.

8.4.7. Review of Community Attachment to the Forest Resource

The attachment of the communities to the forest and forest resources in Ethiopia varies from region to region depending on ecological conditions, socio-cultural values and economic factors. The

agricultural communities in the Ethiopian highlands use the forest resources differently from the communities in the lowlands inhabited by the agro-pastoralists, pastoralists and hunter-gatherers. The communities living close to the forests are usually poor with limited possibilities for living and as group discussants revealed they are highly dependent on timber and non-timber forest products. This is because the local communities in the high forest and remote areas of Oromia, SNNPR, Gambela and BGRS have low access for farming, animal husbandry and to the market. As the observation in Oromia region Harana Buluk Woreda indicated most people use forest to harvest wild coffee, fuel wood, grass for thatching roofs, and to feed cattle, and to harvest honey from traditional beehives. Similar conditions have been observed in the Woredas of the Southern region and other regions. As key informant interviews further revealed the high dependency on the forest is at the time when crops and livestock are insufficient which makes the forest products the indispensable sources of food and income. Such cases indicate that the forest products play important role as source of income generation among many forest communities.

8.4.8. Livestock Seasonal Migration to Forests

Pastoralism is a significant socio-economic sector in Ethiopia. It is a tenure system that evolved to meet the constraints of local, often difficult, environments and to facilitate the operation of complex spatial and temporal land use patterns. The communities in the lowland areas keep livestock as a saving investment. The communities in the lowland areas are pastoralists that have a transhumance system for coping seasonal hard times. The transhumance system in the lowland Oromo community has a well-known tradition known as *Godaantuu*. *Godaantuu* is moving their livestock seasonally in order to exploit areas away from their permanent settlement sites. Communities from the lowlands of Bale Zone of Oromia Region make influx into the Harena Forest, and settle for 3-4 months in the dry season (between the months of December and April). *Godaantuu* system is a customary natural resource use practice regulated by the traditional institution called *Abbaa Ardaa*. *Abbaa Ardaa* regulates the opening and closing of dates for seasonal livestock grazing, use area and use patterns of grazing in order to avoid degradation of particular areas, and enable particular groups to control their grazing territory. It appears that the early *godaantuu* system gradually undermined and the intuition become weak. Hence, through time, the formal *Abba Ardaa* institution become replaced by the informal institution that lead to free to all seasonal grazing area practice. Livestock in Harena Forest for instance reported to stay longer than the traditionally known 3-4 months causing adverse impacts on the structure and composition of grazing resources and forest vegetation. It is required to support the formal *Gondaantuu* system by the formal government institution to restore and strengthen this traditional system before it totally disappears.

8.4.9. Traditional forest conservation practices in the SNNPR

An ancient people speaking an Omotic language, the Gamo protect remnant forests, burial grounds and traditional assembly places across Ethiopia's vast southwestern plateau. The Gamo culture is bound intimately with the land. The Gamo's "traditional activities depend on a harmonious relationship with the local environment, which frequently contributes to minimizing environmental disruption and thereby maintaining an overall ecological equilibrium." In the highlands, the Gamo have protected at least 272 sacred groves along waterways and on the tops of hills, these being the remnant forests of formerly vast Afromontane woodlands.

They distribute information to increase awareness of the importance of the forests and other sacred sites to not only the cultural integrity and diversity of southern Ethiopia but also the biological diversity and environmental health of the region. Sacred groves have enormous significance to the people. Local communities have well established traditions, cultural respect and sense of interconnectedness with these groves. Sacred groves also harbor spirits that help families and protect them from any misfortune. Prayers are offered to the deity by the ritual leaders and community elders in the sacred groves (Desalegn Desissa and Healey, 2012).

The Custodians believe in the sanctity of sacred groves and the spirits inhabiting them. Ritual leaders known as *eqaa* perform offerings and make prayers each year to maintain the sanctity of the groves for the wellbeing of the whole community. As a result of the traditional belief systems of the local communities protection is offered to the sacred groves that contrast the protection offered to other natural and semi-natural habitats in the area. It has made these places very important reservoirs of biological diversity. They preserve the highest diversity of plant species compared to other areas. According to a study by Desalegn Desissa and Healey (2012), a botanical survey of six sacred groves recorded 152 plant species in a sample area of 2.24 ha, of which 19 species were endemic to Ethiopia. Two of these were tree species (*Cordia Africana* and *Hagenia abyssinica*) listed as priority species for national conservation and one tree species (*Prunus africana*) is included in the IUCN red list of threatened species. The biodiversity of the six sacred groves was higher than the four non-sacred forests with which they were compared. In the same study by Desalegn Desissa and Healey (2012), it was reported that all plant species present in the sacred groves were protected through the traditional belief systems and the use of these plant species is carefully managed. While cutting trees is not permitted, limited gathering of non-timber forest products such as fruits (by children), and plants for medicine and ritual initiations (by ritual leaders) is allowed. Grazing is not allowed. The Custodians believe that if anyone enters the sacred groves or especially if someone cuts trees or kills animals in the groves, the spirit will bring wrath to the village.

8.4.10. Ethno-botany

Since ancient times, human being used plants for the purpose of disease control and prevention. Ethiopians have diverse culture on ethno-botany, the science and art of using plants for medicinal value. Both higher (trees) and lower forms of plants (herbs) are used to treat both human and animal diseases. Parts used for the purpose can be leaves, seeds, fruits, roots, barks and/or woods. *Osmium articifolium* (Demakese in Amharic) which is used to treat flue, cold and headache and *Hygenia abssynica* (Yekoso Zaf in Amharic) used to treat tape worm are the most herbs and trees respectively used by most Ethiopian. There are many other species mentioned during the key informant consultation, focus group discussion and household interview used as human and animal medicine. The problem with the development and use of traditional medicine is by only some community and

family members that the transfer of knowledge on the species is restricted to that kinship.

8.4.11. Forest as a Household Food Security Source

Rural people of Ethiopia are endowed with a deep knowledge concerning the use of wild plants which are consumed at times of drought, war and other hardship. Elders and other knowledgeable community members are the key sources or 'reservoirs' of plant lore. Wild-food consumption is still very common in rural areas of Ethiopia, particularly with children and it is evident that the contribution of forests in providing food for local communities is tremendous. Moringa tree is used both as food and medicine to treat wide range of human diseases. Moringa tree is believed to have high nutritional value and used to purify water. *Carissa edulis* (Agam in Amharic), *Rosa abyssinica*, *Dovialis abyssinica*, *Balaniitesa egypticus*, *Ziziphus spinachristy*, *Oputia ficus indica* (Belles in Amharic), *Syzygium guineasis*, *Ficus sycamores* (shola), *adansonia digitata*, *Cordia africana*, *tamarindus indica* (Roka in Amharic) are some of the common plant species used as a human food in their respective ecological zones where they grow. REDD+ project needs to critically assess and address this issue before implementing its projects.

8.4.12. Forest as Cultural and Symbolic Values

Forests provide the venue for many cultural events. In many parts of Ethiopia, particularly the Oromo people, forest areas and specific trees are protected and valued for particular cultural occasions and as historic symbols though each community has its own traditions associated with sacred areas and, as a result, the species that are found in them vary greatly. Sacred and grave areas are planted with trees to symbolify ancestral or family burials.

Trees like the *Ficus sur* (Odaa in Oromo language) are used as a 'hall' to get assembled under it when settling grievance. The judicial function of trees and ritual function of forest (trees) include area where social and political values, morals, secrets, and laws are passed on to the younger generation practiced by some of the communities in Ethiopia.

8.4.13. Forest and Forest Product Uses

One of the major use of the forest in Ethiopia is for energy purpose. The household energy requirements of this large and fast growing population is supplied still from traditional energy sources. Woody Biomass energy at the national level provides large portion of the total domestic energy consumption. If there is imbalance of demand and supply of woody biomass energy it has severe implications on the natural resource base. In urban areas, fuel saving technology need to be expanded and demand for wood must be reduced. Because of the scarcity of fuel wood many households burn dung and crop residues. The use of dung excludes its contribution of the soil nutrient pool, make worsening declining crop yields due to soil erosion. The burning of crop residues prevents their use as livestock feed for a livestock population. Generally use of fuel wood require balanced on demand and supply in order to have impact barely meeting its energy requirements for maintenance.

The consumption of woody biomass for various purpose can be altered by external factors. In Somali Regional State, a significant quantity of wood is used for lighting fires at night to protect livestock against wild animals. Woody biomass energy required to heat houses during the wet season especially in the Highlands increased more than dry season.

8.4.14. Forest and Non-Timber Forest Products (NTFP)

The contribution of NTFP to the rural community of Ethiopia is enormous. The rural community gets ropes (*hareg*), water, gum and resin, fruit, coffee, wild foods and fruits, honey, spice, seed, wild-meat, grass for the livestock, wood-bark for beehive making are some of the non-timber forest products (NTFPs) the community enjoys from the forest resources. Some of the NTFP are directly used by the household while others are sold and generate income. While spice is special to the Western parts of Ethiopia's forest, the other NTFPs are almost common to all the forests. REDD+ in its project design and implementation, needs to give due consideration to the benefits the communities are enjoying from the forest resources as NTFPs so that the well-being of the communities who depend on the forest will not be disrupted.

8.4.15. Settlements wit in the Forest

Forests are considered as free, unoccupied area for settling by some people in Ethiopia. As a result, there are rapid illegal settlements in all the forests of the country. Bale, Borena, Illubabor, Sheka, Bonga, etc. forests are settled by people coming from the different corners of the country. The forest management practices of the settlers and the local communities in the area are quite different. The settlers directly engage in clearing the forest and use it for farming. As a result, there are often conflicts between the settlers and the local communities. REDD+ project should focus on the prevention of further settlement in the forest and if resettling of those already found in the forests is needed, it should be done as per the framework guide in the RPF.

8.4.16. Forest Related Grievances

In general, grievances related to the natural resources are commonly Africa where the communities usually enter into overuse, conservation and management of forests. However, due to its direct relationship to the livelihood of millions of Africans the forest related grievances are frequent and worth mentioning here. As field reports from different regions and Woredas indicated the forest related grievances take place among the communities, communities with guards or communities with outsiders. For example grievance rises between guards and the community in the Amhara region, Banja Woreda; in the Somail region, Yoo'ale Woreda between the local communities and those who come from the Republic of Somalia to produce charcoal; in Oromia region, Anchar Woreda between the Communities and Oromia Forest and Wildlife enterprise; in SNNPR, in Wondogenet Woreda when the community tried to graze their livestock in the protected conservation areas. Thus, as field observation indicates forest related grievances do exist in different regions of the country in different forms and for various reasons.

8.4.17. Cause of the Grievance

Literatures assert that grievance commonly arises over disagreement of tenure, access, control and distribution of forest lands or products (Mean and Josayma, 2002). The need to expand agriculture, disagreement on ownership right and community's dependence on forest are the principal or root causes leading to various forms of grievances.

Grievances arise between the government that tries to conserve forest ecosystem and the community that is eager to use forest. There are grievance cases between the government initiative to expand agricultural activity and the need to conserve forest biodiversity at the same area.

Grievance on ownership right: The grievance of ownership right is also central to the forest related grievance that can lead to deforestation in the long term. There are various problems arising from the absence of clear ownership right or conflicting ownership rights, which serve as sources of forest related grievances. These include absence of clear ownership right, lack of awareness on legal ownership, *de facto* ownership of forest by the community and *de jure* ownership of the government, inability to get certification for the agricultural lands.

Local community's dependence on forest for livelihood: Local community's dependence on forest for livelihood and other uses mainly for construction materials is another source of grievance. Due to the absence of alternative energy source in the area, people depend on sale of fuel wood. Sale of timber is also a source of income, and people need forest products for agricultural tools.

Poverty or absence of alternative means of subsistence also forces people to depend on forest: This breeds grievance when government authorities attempt to restrict access to the forest. Other sources of grievance in forest management include the absence of community participation during demarcation, forest management, prohibition of access to forest and non-timber forest products (NTFP), increasing population pressure, lack of grazing area, and confiscation of peoples' land during demarcation.

8.4.18. Grievance Management Mechanism

Some literatures identify three major grievance management mechanisms (e.g., Engel and Korf, 2005). These include customary grievance resolution comprising negotiation, mediation and arbitration; national legal system that includes adjudication and arbitration; and finally alternative grievance management that mainly includes consensual negotiation. The different grievance management approaches have their own suitability and convenience for different forms of grievance.

As data from different field observations indicated there are different mechanisms of grievance management and resolution in the country which are not only used for resolving forest related grievances but also for overall social, economic and political aspects of life. However, given the nature of the Ethiopian society grievance management system could be divided into two; as formal and informal or modern and traditional systems. During key informant interviews and group discussion the participants identified traditional mechanisms of grievance resolution in their respective Woredas and Kebeles. Among these for example, the informants pointed out in the Amhara region the existence of 'Yehager Shimagile'; in Oromia around Yabello, 'Abba Allengaa' which is part of the Oromo *Gada* system; in SNNPR around Arbaminch Zuria Woreda, there is *Moga* and *Haleqa* traditional leadership which plays very vital role in grievance management and resolution. Customary grievance resolution mechanism exists in other areas where field assessment has been carried out and it is indispensable to integrate locally accepted grievance resolution mechanism with formal legal

system.

9. Forest Governance

9.2. Overview of Forest Governance System

Ensuring sustainable forest management, typified by balancing multiple uses among many different users, is critically dependent on the quality of the governance employed in the forest sector. Forest governance is increasingly being recognized as an essential factor of ensuring long term forest conservation and sustainable forest management. Governance involves the formulation, administration and implementation of policies, legislation, regulations, guidelines and norms relating to ownership, access, rights, responsibilities and practices for sustainable management of forests at the local or national levels. Forest governance generally concerns the qualities of decision making processes in forest management. Good forest governance is achieved by clarifying the relationships, rights, responsibilities and incentives between forest users and government with regard to the basic approaches how forests are developed, conserved and utilized.

Forest sector governance is defined as the modus operandi by which people, stakeholder groups, and institutions (both formal and informal) acquire and exercise authority in the management of forest resources, to sustain and improve the quality of life for those whose livelihood depends on the sector. Forest governance has been recognized as one of the key issues that should be addressed to ensure successful implementation of REDD+. Addressing the fundamental drivers of deforestation and ensuring the sustainability of approaches adopted to reduce deforestation and degradation requires strong attention to forest governance. Good governance can promote equitable distribution of forest benefits, honor traditional rights and knowledge, and provide the platform for prior and informed consultations with legitimate stakeholders. Positive outcomes of REDD+ requires good governance that addresses gaps with regard to tenure rights, regulatory safeguards and grievance redress mechanisms.

Forest protection has now become increasingly a complex subject that demands a critical shift in governance. This shift is sometimes characterized by a transition from government to governance and reflects the fact that governments no longer are, and in many cases cannot be, the sole source of forest decision making authority. Accordingly, effective forest governance requires different forms of partnership among various stakeholders. It also requires the participation of the public, especially at the local level. The existing federal system of Ethiopia constitutionally recognizes the allocation of adequate powers to the lowest units of government for the purpose of enabling the people to participate directly in the administration of such units (FDRE Constitution, Article 50 (4).) This is also relevant for the forest governance and hence this constitutional rule needs to be sufficiently explored to enhance the effective and collaborative implementation of forest governance in Ethiopia by ensuring the participation of all stakeholders. However, decentralization of forest governance has advantages over non-decentralized systems.

9.3. Historical Perspectives of Forest Governance in Ethiopia

Though modern type of sectoral policies are not known to have long histories in Ethiopia, there have been various initiatives to formulate legislations, decrees and guidelines that were aimed at guiding the sustainable management of the forest resources of the country. The evolution of Ethiopian forest policy is a dynamic process which has been influenced by interplay of structural factors such as national political orientation, economic priorities, environmental calamities, and global forest related discourses (Alemayehu Negassa, 2014).

Towards the end of the 19th century, one of the decrees of Menelik II stated that:

"... Coniferous trees should be utilized only for building houses, not for other purposes. Those trees with flowers and medical trees such as Hagenia abyssinica (Koso) should be handled with the utmost care... As it is necessary to enhance the awareness of the people, explanations should be made... Anyone who violates these rules shall be apprehended and presented before the Emperor..."(Tilahun Dereje, 1996 E.C.)

Though they were evacuated from the country before they properly introduce and implement it, historical records show that Italians issued various forest laws and regulations. (Melaku Bekele, 2003). Nevertheless, the first comprehensive and modern forest laws were enacted during Emperor Haile Selassie I in 1965. Three subsequent proclamations were enacted in 1965. These were: (a) State Forest Proclamation (Proclamation No. 225 of 1965); (b) Private Forests Conservation Proclamation (Proclamation No. 226 of 1965); and (c) Protective Forests Proclamation No. 227 of 1965.

The State Forest Proclamation had economic as well as ecological uses of forests as its purpose to develop forest resources. It also recognized the rights of the succeeding generations to utilize forest products. Hence, according to that Proclamation, it would be fault or offence to greedily exploit forests by the contemporary generation. That is, the cotemporary generation was imposed with the obligation to act as trustee of forests. All forests which were not owned or possessed by any person were designated by the Proclamation as the State forest. (Article 4). It was the Ministry of Agriculture that was charged with the conservation, protection, management and utilization of State forests.

The objectives of having private forests were not different from that of State forests. According to Proclamation No. 226 of 1965, private forests were all forests not owned by the state but owned by a person or a group of persons. Although private forests were owned by individuals or a group of persons (natural as well as artificial persons) they were under strict control of the Ministry of Agriculture.

According to Proclamation No. 226/1965, protective forests should be administered and utilized under the general supervision of the Minister of Agriculture and no person should remove, utilize, process or destroy any forest product from a protective forest except in accordance with the relevant provisions of the proclamation and regulations to be issued.

In 1968 nine consecutive regulations had been issued for the implementation of all the three proclamations of 1965. Generally, the regulations could be categorized as follows: protection and exploitation of private forests; protection and exploitation of state forests; management of protective forests; establishment of community forests; powers of rangers; powers of forest

guards; and trade of saw logs and veneer logs regulations.

Because of a radical change in property ownership rights of the Derg regime, several laws were issued to nationalize major public resources. Likewise, the regime issued Forest and Wildlife Conservation and Development Proclamation No. 192/1980. The regime repealed the 1965 proclamations and recognized three new forest ownership types; namely, state forests, urban and peasant association forests. Each peasant association was obliged, by the Proclamation, to develop and conserve its own forest by planting trees within its locality in areas to be designated by the Authority. Forest and Wildlife Conservation Authority (FAWCDA), established by Proclamation No. 192/1980, was recognized as the strongest forestry institution in the history of the country (Melaku Bekele, 2003). That era was characterized by a strong emphasis on production forestry driven by fuelwood crisis and a price hike of fossil fuel. These national and international factors had also resulted in an increased flow of funding from donors for plantation of fast growing exotic plantations. FAWCDA was able to increase the area covered by planted trees from 42,300 ha in 1973 to 250,000 ha in 1985 within 10 years. During this period there was significant increase in the number of staff (10 folds) as well as the budget (7 folds) allocated for the sector. Among several regulations enacted in 1968, the 1980 Proclamation maintained the Exploitation of State Forest Regulations No. 345/1968, the Management of Protective Forests Regulations No. 347/1968, the Powers of Rangers Regulations No. 349/1968, the Powers of Forest Guards Regulations No. 350/1968, the Trade of Saw Logs and Veneer Logs Regulations No. 351/1968.

Though various plantations had been promoted during the Derg regime through active mobilization of associations, lack of transparent benefit sharing mechanism, pseudo-community participation and lack of shared goals and purposes for the established forests were some of the factors accounted to its failure. Alemayehu Negassa (2014) mentioned that the top down command and control system of the socialist military government did not allow open competition advocating strong production forestry and/or other land use options. Communally owned forests of the Derg regime have also suffered from the syndrome of “the tragedy of the commons.”

After the fall of the Derg regime, another new Proclamation, a proclamation to provide for the Conservation, Development and Utilization of Forests Proclamation No. 94/1994 was issued by the Transitional Government of Ethiopia. That proclamation recognized three forms of forest ownership: state, regional and private. The proclamation mainly emphasized on the sustainable utilization of the country’s forest resources through public participation and benefit sharing by the concerned communities in its preamble. During this period of the history of the forest sector a comprehensive four volumes working document, Ethiopian Forestry Action Program (EFAP) which was initiated in 1990, and was intended to provide an overall guidance to forest development and conservation utilization was finalized. EFAP was aimed at ensuring sustainable development of production forests, increasing agricultural production by reducing land degradation and increasing soil fertility, conserving forest ecosystems and improving the welfare of rural communities. EFAP was prepared following the general framework of Tropical Forests Action Program that was initiated at the ninth World Forestry Congress held in Mexico in 1985.

The EFAP was basically developed from the ten years action plan of FAWCDA (1984-1993) which targeted to increase the forest cover of the country to 24%.

The latest forest proclamation is the Proclamation No. 542/2007 which is operational at present. Prior to the enactment of the present forest law, the Ethiopian government issued Forest Development, Conservation and Utilization Policy and Strategy document in that same year.

9.4. Land Tenure, Carbon Rights and Benefit Sharing

9.4.2. Land Tenure

In Ethiopia, currently the issue of land ownership and land tenure rights has been regulated by the Constitution. According to the FDRE Constitution, Article 40 (3), the right to ownership of rural and urban land, as well as all natural resources is exclusively vested in the State and in the people's of Ethiopia. As a result, land is not the subject of sale or other means of exchange. All persons who are using land have the right of using the land and/or deriving the fruits thereof. This is what is called a usufruct right. For any person to have a claim over land in the sense of usufruct, he/she must show that he/she has made an improvement traceable to his/her labor or capital. One cannot lay claim to land without establishing improvements thereon. Unimproved land in this sense belongs to the state. Those who merely extract the bare natural fruits of communal land and landed resources cannot under this approach claim to have usufruct right over those resources for they have not met the requisite condition for claiming such right. (Muradu Surur, 2013) This goes well with the meaning given to private property by the constitution, which states that: "private property shall mean any tangible or intangible product which has value and is produced by the labor, creativity, enterprise or capital of an individual citizen, associations which enjoy juridical personality under the law, or in appropriate circumstances, by communities specifically empowered by law to own property in common."(Article 40 (2)) Communities can own property in common so long as they are particularly empowered by the law to own property. For instance, the forest laws of some regional states (e.g. Oromia forest law) recognize community ownership of forests.

The details of land use rights have been provided by lower laws (proclamations and regulations) enacted by federal as well as regional governments. The Federal Rural Land Administration and Utilization Proclamation No. 456/2005 recognizes the land use rights of private persons, communities, governmental and nongovernmental organizations. These organs can be issued landholding certificates for definite or indefinite period of time. Farmers, semi-pastoralists and pastoralists have the maximum tenure security as their tenure rights have no time limits. (Article 7 (1)). However, others' tenure rights (e.g. communal holdings) can be limited by the rural land administration laws of regions. (Article 7(2)).

The other aspect that could affect rural land tenure right is the possibility of distribution of land in some instances. In accordance with land administration laws of the regions, farmlands whose holders are deceased and have no heirs or are gone for settlement or left the locality on own wish and stayed over a given period of time shall be distributed to peasant farmers, semi-pastoralists and pastoralists who have no land and who have land shortage. (Article 9 (1)).This can be applicable differently in different regional states based on their prevailing circumstances and they apply land distribution as the last resort. When land distribution takes place, two requirements must be fulfilled and these are: (1) it shall not be less than the minimum size of landholding and in a manner that shall not result in fragmentation of land and (2) the distribution shall not cause degradation of natural resources (Article 9(3)).

The other critical aspect of the land tenure right under the federal land law is the right of women. It is

on the basis of the FDRE Constitution, Article 35 (7) which states: “Women have the right to acquire, administer, control, use and transfer property. In particular, they have equal rights with men with respect to use, transfer, administration and control of land. They shall also enjoy equal treatment in the inheritance of property, “that the land law provides for the rights of women. According to the Proclamation No 456/2005, women who want to engage in agriculture shall have the right to get and use rural land (Article 5 (1), (c)). Moreover, married women have the right to have the landholding certificate jointly with their husbands. (Article 6 (4).

The Proclamation allows farmers, semi-pastoralists and pastoralists to transfer their land use rights through inheritance to members of their family. It also allows them to lease their landholdings to investors for a limited period of time, according to the regional land administration and use laws. Even if there is no provision for farmers, semi-pastoralists and pastoralists to present their use rights as collateral, investors who leased rural lands from the former have the right to present the land they leased as collateral. As seen from practice, farmers, semi-pastoralists and pastoralists are not allowed to present their landholding rights as collateral.

This federal land law imposes an obligation on the land users regarding land management and protection.¹⁵ Moreover, the Proclamation provides for the development and implementation by the competent authority of a guiding land use master plan, which takes into account soil type, landform, weather conditions and plant cover and socioeconomic conditions which are based on a watershed approach.¹⁶

There are a number of policy and strategic documents in Ethiopia that show the importance of tenure rights for nature conservation and rural economic development. These include: Rural Development Policies and Strategies (2001), Environmental Policy of Ethiopia (2007), The Food Security Strategy of Ethiopia (1997), Ethiopia’s Agricultural Sector Policy and Investment Framework (PIF) 2010-2020, Ethiopian Strategic Investment Framework for Sustainable Land Management, Growth and Transformation Plan (GTP).

The discussion on tenure right is relevant for REDD+ implementation as a clear and secure tenure system is one of the conditions that contribute in the success of REDD+. It incentivizes actors to make long-term investments of labor, capital and skill in land use. Secured land tenure increases land productivity due to careful and diligent investment on the land. This in turn contributes to the natural resource protection and management efficiency by reducing the pressure on the natural resources, if effective legal enforcement is in place, to control further encroachment of forests triggered by additional income from land investments.

9.4.3. Carbon Rights

There remains a huge concern regarding the presence of a mechanism to implement social and environmental safeguards to protect the rights of local peoples. Carbon emission reduction brings a new property right that may demand policy and legal revisions. Ecosystem service provided by a forest in sequestering carbon is inextricably linked with the sustainable management of that forest, and therefore the principal focus should be placed upon those with rights to manage or control the forests.

¹⁵ Article 10 (1) of the Proclamation provides that: “A holder of rural land shall be obliged to use and protect his land. When the land gets damaged, the user of the land shall lose his use right. Particulars shall be given in the land administration laws of the regions.”

¹⁶ See Article 13 (1). By this, the Proclamation underlined on the importance of a land use master plan, which is long awaited by many Ethiopians. Until now, the said land use plan has not seen the light of the day.

There is no methodological framework as such to identify or provide adequate guidance on how to address the existing ambiguity on carbon rights. For Ethiopia to realize optimized community benefit it is very important to recognize the tenure rights of forest dwelling local people. Setting clearly defined carbon right benefits not only local communities but also encourages the private sector that wishes to deploy capital in support of early-stage demonstration activities and carbon business, as well.

As it stands now in Ethiopia, there are no clearly defined carbon rights for those who are engaging in the implementation of REDD+ activities. Even if the carbon rights can be handled through agreements concluded between those who engage in the REDD+ activities on the one hand and the concerned government organs on the other, existence of clear policy and legal directions on the issue is helpful. It is generally understood now that the owner of the forest also owns the carbon. In the Ethiopian setting, all natural forests are owned by the government and hence it is the government which is the bearer of carbon rights. But this does not preclude benefit sharing for local communities or organized groups through agreements. This was also reflected during the discussions with the stakeholders, particularly those in the forestry sector. The suggestions are to adopt the experience from the A/R CDM initiatives, which refers to organizing participating local community members into cooperatives and share benefits as per agreed upon bylaws to be formed as one aspect of the cooperatives formations. Thus, the Humbo CDM project might serve as a model for learning benefit sharing lessons.

9.4.4. Benefit Sharing

In a benefit sharing scheme there is the benefit and the beneficiaries. There is also a mechanism used for recording the benefit and associated obligations as well as distributing the benefits. Technically, benefit sharing should be the sharing of benefits among parties involved. A cursory review of the recent application of the term benefits in the context of REDD+ reveals that it is used to mean incentive, opportunities, additional payments, rents/profits, nonfinancial benefits provided for free in a partnership, compensation, and so forth. (DijiChandrasekharan Behr et al (2012)).

The success of REDD+ also depends on getting incentives for all stakeholders, including through policy measures such as the forest management rules on local use of forest resources and rights to forest lands. For effective and sustainable REDD+ there needs to be clear principles of benefit sharing which also determine the forms of benefit distribution.

In a situation where carbon rights are held by governmental agencies, there should be clearly defined benefit sharing mechanisms. It is also strongly recommended that there should be an institution that safeguards the right of the local people. Inadequate benefit sharing from forest resources have been identified as drivers of deforestation, indicating the importance of communities and equity considerations in successful REDD+ governance. Community participation is a key element of any development endeavor of Ethiopia and it is emphasized in policies and laws. For instance, Forest Conservation, Development and Utilization Proclamation No. 542/2007 makes references to community consultation and participation in the context of forestry governance and management.

Despite a strong statement for community participation, the forest law dwells scantily on benefit sharing. In addition to its pre-ambular statement, it provides only once on benefit sharing in its body part. In this regard, Article 9 (3) provides that: “*forest development, conservation and utilization plans shall be formulated to allow the participation of local communities in the development and conservation and also in the sharing of benefits from, the development of state forests*”. From this it can be seen that the issue of benefit sharing, especially for REDD+, needs to be addressed by taking experiences from best practices from around the world.

The national forest law which is under revision and the consequent regulation needs to clearly address benefit sharing mechanisms that ensure the benefits of the local communities dependent on forest products and goods. Successful implementation of REDD+ requires a safeguard system that ensures an optimized and equitable benefit sharing among the local communities while serving as a proactive tool to identify potential and actual risks associated with strategic measures proposed to address drivers of forest degradation and deforestation. Thus, transparent benefit sharing mechanisms should be designed with active involvement of the local communities. Otherwise, it is difficult to address the drivers of deforestation and forest degradation in a sustainable manner and achieve the target set for REDD+. As has been observed from field visits, there have been lots of complaints from forest user groups, who engaged in PFM in that the benefits accrued from conservation activities are meager. If this condition continues without getting effective solution, it could be a challenge for the implementation of REDD+.

The problem of benefit sharing should also be addressed to avoid unequal benefit sharing practices. It clearly recognizes the “absence of benefit sharing mechanism e.g., how much for community and how much for the project developer, and how much for the government (Ethiopian Forest Resources, p. 23). Men and women (including youth, the poor, etc.) have different relationship with the forest i.e. different roles, responsibilities, interests, constraints due to social, cultural, economic, and ecological factors. Therefore, any forest mechanism put in place should consider the gendered differences between men and women in relation to resources and institutions (central and local governments, social networks) who serve as channel to access to forest resources. While financial instruments such as REDD+ and CDM are seen as a catalyst for promoting management of forest resource to create sustainable socio-economic development; it is essential to develop alternatives such as community based forest enterprises, social and economic value of non-timber forest products (NTFPs) in which African women play a key roles but still face the competitive constraints of the global market.

9.5. Law Enforcement

Law is meant to solve social, economic and other multitudes of problems of the society. Each one of the numerous relationships between people needs to be managed. A vast variety of legal rules provide for all the different needs were formulated to serve these important purposes. Law enforcement is a difficult task to achieve in many developing countries including Ethiopia. Law enforcement needs the fulfillment of some key requirements. These include: (1) enacting subsidiary laws (such as regulations or other instruments like directives and guidelines) for primary legislation (such as proclamations), as the latter are crafted in a general language; (2) organizing efficient law enforcement organs (like the police, prosecution offices and courts); (3) establishing coordination among various stakeholders for effective functional linkage; (4) enhancing the capacity of various stakeholder institutions including the law enforcement organs; (5) avoiding overlapping of mandates and conflict of interests in different governmental institutions; (6) ensuring institutional stability; and (7) fighting corruption and promoting good governance.

When tested for the above requirements for effective law enforcement, there are gaps and challenges in the Ethiopian scenario. For instance, only few of the primary legislation have subsidiary instruments for their implementation. In addition to lacking provisions for specific application, primary legislation give wider discretion for the judges while interpreting them for assessment of penalty of other specific issues. This is one of the gravest hurdles in the law enforcement in Ethiopia. Another problem that seemed to have been resolved at federal level, also at regional level, is lack of institutional stability in the forest sector. The establishment of Ministry of Forest and Environment

(MEF) now MEFCC at federal level is expected to bridge the long awaited gap of institutional stability, overlapping of mandates and conflict of interests.

When specifically seen, the enforcement of forest laws is in a weak condition. A number of studies have been made on the weaknesses of the enforceability of forest laws in Ethiopia. For instance, Tilahun Dereje (2014) identified; absconding of forest crime suspects when released on bail, acquittal of forest suspects and imposition of insufficient penalty on the criminals, and corruption on top of the problems indicated above, as problems of enforcing forest laws in Ethiopia. While these problems are still persisting, they could pose great challenges for the implementation of REDD+ in the country. Strong efforts need to be done to do away with these problems.

9.6. Good Governance and Anti-Corruption

Ethiopia recognizes the need to establish inclusive democratic governance system, fighting corruption and strengthening institutional capacity to effectively implement and monitor national development plans. Thus, the federal government issued the Federal Ethics and Anti-Corruption Commission (FEACC) through Proclamation No. 235/2001 which was subsequently repealed and replaced Proclamation No. 433 of 2005, as an independent body which is accountable to the Prime Minister for the purpose of creating a society that no more tolerates corruption, preventing corruption offences and other improprieties, and exposing, investigating and prosecuting corruption offences and impropriety (Article 6). Guided by these purposes the FEACC plays useful roles by gathering information on corrupt practices. The Commission is also charged with the duty of studying and recommending changes to the working procedures of public institutions and enterprises and ensuring the implementation of those recommendations. As a result, nowadays, most of government institutions established anticorruption and ethics sections that follow and report corruption and ethical issues to higher level government authorities. These sections play profound roles in establishing good governance by allowing corrective measures before corruption attains an irreversible stage. The FEACC is also empowered to register assets and financial interests of public officers as part of a compulsory asset declaration procedure for public officers as prescribed under Disclosure and Registration of Assets Proclamation No. 668/2010. Ethiopia is a signatory to both the United Nations Convention against Corruption (UNCAC) and African Union Convention on Preventing and Combating Corruption (AUCPCC).

In the forest sector of Ethiopia there are slots exposed to corruption. As revealed from discussions conducted with law enforcement organs of various regional states in a number of occasions, forest related offences are linked with corruption at various levels. For instance, while there are several forests that are not clearly demarcated and legalized the current forest governance provides conditions at which such forests can be transferred to other parties and allows a permit system. Use of a permit system with huge penalties for violators of the rules and regulations in the absence of formal and legal demarcation is likely to lead to corruption. While it is important to recognize the urgent need to demarcation and legalization of important forests, a strong corruption control system should be in place in particular to government owned commercial forests.

Owing to the important position given to forest sector by the CRGE Strategy and other economic and ecological functions of forests including REDD+, the federal as well as regional anti-corruption commissions are required to give due attention to corruption and impropriety in the forest sector.

9.7. Major Forest ownerships and management in Ethiopia

9.7.2. Community-Based Forest Management

Community forestry has been promoted during the Derg Regime and several forests have been established. However, those community based forest development initiatives were not successful because of lack of clearly set objectives, absence of defined benefit sharing mechanism and weak community participation. Participatory Forest Managements (PFM) as more successful community based forest management is then introduced in 1990s. PFM involves the participation of the local community living near and in a forest in all aspects of management and sharing of the benefits accrued from the sustainable management of the forest resources. The introduction of PFM as a co-management of forest resources has been promoted and facilitated by NGOs such as FARM- Africa, SOS Sahel, GTZ and JICA. PFM as forest management tool is recognized to bring success in terms of devolving the forest property right from the hands of the state to the community. It has also resulted in improved regeneration and increased forest stock as compared with non PFM forests. Moreover, it contributes to improved livelihoods by facilitating the use of part of the products of the forests.

Forest Development, Conservation and Utilization Policy and Strategy of 2007 provides for the possibility of community forestry on some specified lands. Section 4.4 (b) of this document states that:

“Enable the nearby communities, individuals, associations or investors to conserve and make use of natural forests that are not designated/demarcated as protected and productive forests, after the preparation of appropriate management plans drawn based on the directives to be issued.”

From this policy and strategy document it can be seen that patches of natural forests outside the designated or demarcated areas can be managed by the local communities. Although communal forests have not been separately recognized under Proclamation No. 542/2007, they became part of private forests.¹⁷ Therefore, people who are organized as forest user groups such as PFM or other forms of community organizations can develop forests on lands which are given to them by the government as communal lands.¹⁸ The Proclamation No. 456/2005, also provides for the possibility of handing over degraded lands for community forest development. In its Article 13 (9) the Proclamation states that: “rural lands that have gullies shall be made to rehabilitate by private and neighboring holders and, as appropriate, by the local community, using biological and physical works.” These two ways of performing community forestry are recognized by the federal land and forest laws. Both forests will be managed according to the management plan prepared with participation of the local communities.

Areas particularly identified within the productive forests of the state can be given to communities to serve as community forests on the basis of concession. Even if concessions are contracts given out to any person (including organized communities) to utilize a given state forest for a defined period of time, it is possible to make the ‘defined’ period of time longer so that members of the community feel sense of security.¹⁹ The law fully recognizes the property rights of the concessionaire. In this regard Article 4 (5) of Proclamation No. 542/2007 provides that: “Any person who develops forest on his/her landholding or in a state forest area given to him/her on concession shall be given assurance

¹⁷ Private forest has been defined by the Proclamation as: “a forest other than state forest developed by any private person and includes a forest developed by members of a peasant association or by an association organized by private individuals, investors and governmental and non-governmental organizations.” (Article 2 (5).

¹⁸ The Rural Land Administration and Land Use Proclamation No. 456/2005 on its Article 2 (12) defines the meaning of communal land as: “rural land which is given by the government to local residents for common grazing, forestry and other social services.”

¹⁹ Article 2 (1) of Proclamation No. 542/2007 defines concession as: “a contract given out to any person to utilize a given State forest for a defined period of time.”

to his/her ownership of the forest.” When this assurance of forest ownership is accompanied by longer concession period, it would make protection, development and utilization of communally managed forests very effective.

Moreover, community forests can be developed on the lands which are given to people by the government for various communal purposes.²⁰ From this it can be seen that there are a number of options for having community managed forestry and is a matter of agreement between the people who are organized for developing community forestry and the concerned government organs.

Community-based forest management has a long history in Ethiopia. Many communities have developed culturally how to sustainably manage and utilize forests. Different communities in various parts of the country have different experiences and have found different ways of creating with institutional settings to nurture this participatory way of managing forests.

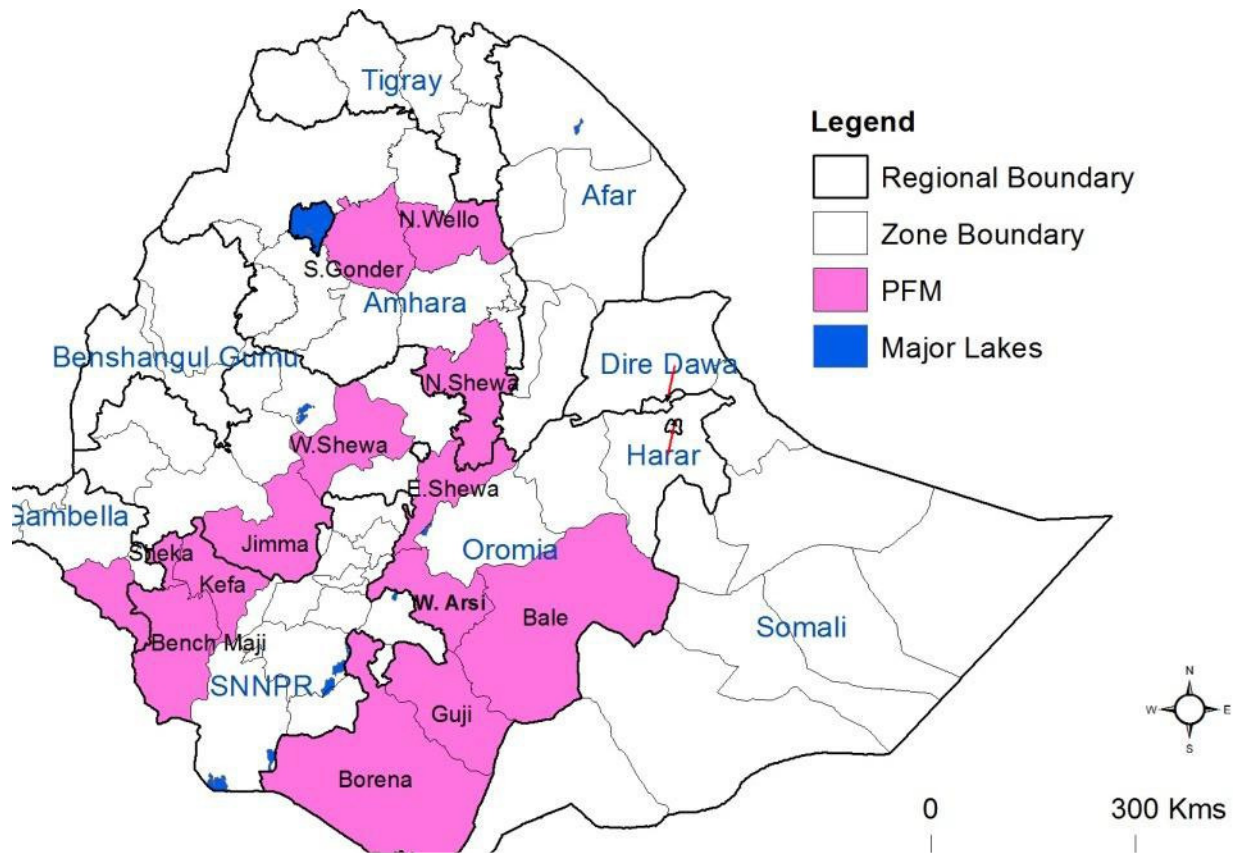


Figure 20-PFM Zones in Ethiopia

9.7.3. Private Forests

Investment Incentives and Investment Areas Reserved for Domestic Investors, Council of Ministers Regulation No. 270/2012 provides eight years exemption from income tax for those investors who engage in private forestry investment in Addis Ababa and Special Zone of Oromia surrounding Addis Ababa and nine years exemption from income tax for those who invest in forestry outside this

²⁰ Proclamation № 456/2005, Article 2 (12).

area.

Successful investments can be made both in the wood and non-wood sub sectors of the forest sector. One of the forest ownership types recognized in Ethiopia is private forest at federal as well as in all regional states which enacted their own forest laws. However, the engagement of the private sector in forestry is negligible. In Ethiopia, forest investments are predominantly in small and medium-sized forest-based enterprises which consist of various sub-sectors from wood based small scale enterprises that produce office and household furniture to non-wood based productions such as herbalists and wild coffee producers and/entrepreneurs. Tree farming by private farm households and entrepreneurs is a growing area of small investment throughout rural and urban Ethiopia (Mulugeta Limeneh and Tadesse Weldemariam, 2010). Forest industrialization is lacking in Ethiopia. Finfinne Furniture Factory, Salvatore de Vita and Family, and Wanza Furniture Industry are the few furniture industries and saw mills probably considered as large scale furniture industries. There are several factors that constrain the involvement of the private sector in forest investment. One of the challenges could be the long investment return and the land security issue. The second constraint is the absence of regulations and guidelines on allocating land for forestry development. The relevant body (MEF) is in the process of putting the right guidelines in place after being approved by the executive body.

In the REDD+ the private sector's role can be expanded from the usual discourse of buyers of emission offsets through carbon markets to directly investing in the forest development. In addition to the income tax incentive, other mechanisms such as secured forest tenure systems need to be introduced to attract private investments to the forestry sector. Without secure rights, private investors lack long-term incentives for maintaining their forest resources or investing in sustainable management of forests. Clear and enforceable land and forest tenure is a precondition for investments in responsible forestry.

9.7.4. Government Managed Forests

All natural forests which are not given to any person (private individuals, a group of individuals or business firms) by concession or those natural forests which are being rehabilitated by local communities are under the ownership of the government. The government may administer these forests in different ways that it thinks fit. For instance, two of the regions, Oromia and Amhara Regional States, have established enterprises to administer state owned forests. The regional State of Oromia issued a Regulation No. 84/2007 to establish the Oromia Regional State Forest Enterprises Supervising Agency. The agency is established: to oversee attainment of a sustainable management and utilization of forests, and implementation of forest policies to provide the existing state forest enterprises with guidance and support so as to make them efficient, modern and sustainable; and to establish new forest enterprises that contribute to the realization of the sustainable management of forests and thereby play an appropriate role in the enhancement of economic growth of the population in the region. Oromia regional state is with the largest forest resources in the country. The region vested full authority to the agency and its sub-enterprises to own, develop, utilize and retain revenue generated from forests of their respective concession areas. Oromia Forest and Wildlife Enterprise has so far done commendable achievements in production forestry.

On the other hand, the Amhara National Regional State Forest Enterprise was established by the Forestry Enterprise Establishment, Council of Regional Government Regulation No. 70/2009. The enterprise was established with the objectives of extensively developing and producing forest and forest products as well as increasing the value of same, reduce the level of unemployment and thereby ensure sustainable gains of the Regional Community by creating wider job opportunities, narrow the

ever growing gap between supply and demand in wood and wood product at regional as well as national levels and enhance saving or generating foreign income by producing forest and forest products, with value addition, exporting same and substituting the imports.

At present both state owned enterprises are serving as major timber and round wood producers and suppliers in the local market. Despite the efforts of these state owned enterprises, the gap between demand and supply of forest products is still increasing. However, the value of these enterprises in terms of demonstrating scientific forest management is commendable. This may attract the private sector as well as organized forest and forest products producer associations towards entering into forestry business.

Since most of the forests in Ethiopia are government managed, the government is the major stakeholder in the REDD+. As the major stakeholder, the government is expected to strengthen its institutional as well as human capacity for the effective emission reduction from deforestation, forest degradation and forest enhancement.

9.7.5. Traditional Forest Management and Resource Use Systems

Communities have developed special skills and knowledge systems how to manage forests through accumulated and handed over experiential learning processes. In many parts of Ethiopia, the local people use indigenous knowledge and well organized indigenous institutions to manage their forest resources and ensuring equitable share of the products from those resources. To mention a few of them, the traditional home garden agroforestry system in the southern and southwest Ethiopia is a widely known practice. In this system, the natural forest is converted to a multistory home garden that constitutes trees in the upper and shrubs and annuals in the middle and lower structures of the system. In addition to trees, the system comprises *enset*, coffee and other food and cash crops.

For instance, the Borena People manage and utilize the rangeland through the Gada governance system. The most important part of the rangeland management system is the obligation that it sets for animal movement to be regulated according to the patterns outlined by elders. The elders determine the use pattern by considering factors such as range availability, rangeland condition and seasonal carrying capacity in to account. The *Kobo* system in the South Western part of the country is another traditional practice of managing forest resources. According to Mulugeta Lemenih and Tadesse Woldemariam (2010) the *Kobo* system is a forest (tree) tenure institution that grants first claimers an exclusive use right over a block of forest, usually for collection of forest coffee, hanging beehives and access to other non-timber forest products. Once claimed, the forest block is de facto individual property, respected by fellow citizens of the area, and the owner has the right to exclude others. This way, the system has resolved what could have been an open access system with threat of degradation by one that allows the interests of the 'owner' in maintaining a sustained supply of products to also prevent access by 'outsiders' and hence prevent degradation.

There are traditional practices that the local people use to manage and utilize forest resources. In some areas important indigenous tree species such as *Ficus vasta*, *Podocarpus falcatus*, *Ekebergia capensis* and *Ficus sycomorus* are conserved by the local people for their ritual purpose. Often the local communities make social meetings and other ritual ceremonies under the shade of big trees. Cutting of these highly valued and respected trees is a taboo. Similarly, several studies have now witnessed that churches retained indigenous tree species highly threatened in other habitats. Trees in the premises of religious institutions are not exposed to illegal cutting. The profound importance of religious institutions and sacred areas in the conservation and development of genetic resources of endangered indigenous tree species of Ethiopia is greatly recognized.

9.7.6. Global Experience on Traditional Forest Management and Resource Use Systems

Over the past two centuries the nationalization of much of the world's forests has eroded and alienated local community forest management systems in many nations. Forest departments, especially in developing countries, with limited financial and human resources, have experienced increasing problems ensuring the sustainable use of millions of hectares of land under their sole jurisdiction. Local communities and indigenous peoples, with few legal rights or responsibilities over the public forest domain, have stood by, while witnessing the rapid commercial exploitation of forests, increasing expansion of large-scale industrial farming and small-scale agriculture.

After having observed the difficulties of managing forests effectively, many countries have started reconsidering the transfer of parts of their forests to be owned or managed by local communities or underserved groups. These efforts were started in Latin America in the 1970s and now spread to African and Asian countries. (White & Martin (2002)). Some countries undergone legal reforms to recognize community-based property rights by reforming land laws to recognize private community-based property rights of forest-dependent communities (e.g. Uganda, Tanzania). In some others, government devolution of limited rights to underserved and other communities by setting aside public lands for underserved communities (e.g. Brazil). Others (e.g. India) have devolved limited rights to local communities to manage and benefit from forests that are still officially considered public land. This process is actively underway in many of African countries, with more complete transfer of rights present only in Tanzania, Gambia and Cameroon. These arrangements, known by terms such as "joint management" and "co-management," do not alter state ownership. They represent a much weaker form of property rights than those provided by private community-based ownership.

Yet in some others, reforming public forest concession policy has been adopted. Among these countries some (e.g. Guatemala) are beginning to adjust traditional industrial logging concession arrangements to encompass underserved and other local communities. Here a company may transfer its concession rights to a new business venture with a coalition of underserved groups as the lead partner. More transfers of use rights between companies and communities are underway and more joint ventures are being explored in these countries. (White & Martin, 2002).

For better results in REDD+ it is better if communities are empowered and get involved in decision-making on forest management, benefits and incentives available for them by equitably sharing the costs and benefits between the government and communities. This can be materialized through effective capacity building of community institutions and members of the community.

10. Legal, Policy and Institutional Framework

10.2. International Convention

The 1995 Ethiopian constitution is the supreme law of the land that has laid out the foundations for Ethiopia's commitment to ensure sustainable development, environmental and social safety. As a result, Ethiopia has given due attention to protect the environment and natural resources by ratifying international agreements and preparing national legal frameworks pertinent to environment and natural resources protection.

Ethiopia is either a party or signatory of many international forestry and environment related agreements. The country ratified a range of conventions that demonstrate the country's commitment to global climate change, biodiversity and desertification problems. The country is also an active participant in the global climate change initiatives. Selected relevant international conventions, protocols, and initiatives are summarized as follows:

10.2.2. United Nations Framework Conventions for Climate Change (UNFCCC)

UNFCC is an international environmental convention negotiated at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro from 3 to 14 June 1992. The objective of the treaty is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". The UNFCCC was opened for signature on 9 May 1992, after an Intergovernmental Negotiating Committee produced the text of the Framework Convention as a report following its meeting in New York from 30 April to 9 May 1992. It entered into force on 21 March 1994. As of March 2014, UNFCCC has 196 parties. Ethiopia ratified the convention in 1994.

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.

10.2.3. United Nations Convention to Combat Desertification (UNCCD)

UNCCD is established in 1994 with an aim of linking development and environment to ensure sustainable management. The fact that the Convention specifically targets arid and semi-arid areas makes it pertinent to the national goals set to the pastoral and semi-pastoral communities. In the 10-Year Strategy of the UNCCD (2008-2018) that was adopted in 2007, Parties to the Convention further specified their goals: *"to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability"*. *The Convention's 195 parties work together to improve the living conditions for people in dry lands, to maintain and restore land and soil productivity, and to mitigate the effects of drought. The UNCCD is particularly committed to a bottom-up approach, encouraging the participation of local people in combating desertification and land degradation. Ethiopia ratified the convention in 1997.*

The UNCCD invites all Parties to adopt and scale up sustainable forest management policies and

practices to prevent soil erosion and flooding, to increase carbon sinks, and to conserve and sustainably use biodiversity (decision4/COP.8). The UNCCD, being the sole legally-binding instrument on land and soil, recognizes the importance and potential for REDD+ in drylands to contribute to land degradation neutrality, sustainable economic growth, poverty eradication and other urgent goals pledged at the Rio+20 conference. *Moreover, the UNCCD is one of the founding institutions of the Collaborative Partnership on Forests (CPF), a policy forum and partnership on all types of forests, including dry forests. In collaboration with other organizations of the CPF, the UNCCD facilitates the UNFCCC, UNFF and other processes related to REDD+.*

10.2.4. United Nations Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has 3 main objectives. The Convention is aimed at the conservation of biological diversity, the sustainable use of the components of biological diversity and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. 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. Ethiopia ratified the convention in 1994.

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 underserved 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 of 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 Aichi 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 underserved 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 underserved peoples and local communities has been repeatedly emphasized.

10.2.5. CITES (the Convention on International Trade in Endangered Species)

CITES is an international 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.

10.2.6. Convention for the Safeguards of Intangible Heritage

Intangible cultural heritage refers to traditions and living expressions that passed from one generation to the other that includes oral traditions, performing arts, social practices, rituals and other traditional knowledge and practices concerning nature and the environment. The major purposes of the convention are to safeguard the intangible cultural heritage, to ensure respect for the tangible cultural heritage of the communities, groups and individuals concerned, to raise awareness at the local, national and international levels of the importance of the intangible cultural heritage, and of ensuring mutual appreciation thereof to provide for international cooperation and assistance.

10.2.7. The Cartagena Protocol on Biosafety to the Convention on Biological Diversity

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international treaty governing the movements of living modified organisms (LMOs) resulting from modern biotechnology from one country to another. It was adopted on 29 January 2000 as a supplementary agreement to the Convention on Biological Diversity and entered into force on 11 September 2003. The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. It establishes an advance informed agreement procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms into their territory. Ethiopia ratified the convention in 2000.

10.2.8. Pan African Agency for the Great Green Wall (PAGWW)

The Great Green Wall Initiative of the Sahara and the Sahel was conceived as a sound initiative towards ensuring sustainable environmental management to African countries. It is anticipated that it could help in strengthening efforts made to arrest loss of biodiversity, control desert encroachment, and improve resilience of the local community to climate change impacts. The GGWSSI is an initiative with a broader target of increasing food security; reduce poverty by diversifying livelihood opportunities through climate resilient development approaches.

This initiative was emerged to protect the expansion of the Sahara desert via planting a wall of trees which stretches from Dakar to Djibouti with a width of 15 kilometers and a length of up to 7000 kilometers. The wall envisioned by 11 African countries (Burkina Faso, Djibouti, Eritria, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan and Chad) on the southern border of the Sahara, and their international partners, is aimed at preventing the expansion of the Sahara desert into the Sahel. Ethiopia ratified the “Convention related to the Creation of The Pan African Agency of the Great Green Wall Ratification Proclamation No. 842/2014” in July 2014.

10.3. National Policies, Laws and Strategies

Forest sector of Ethiopia has been paid considerable national policy and strategy emphasis over the last two decades. There is a national policy and strategy document specifically formulated to this sector. There are also policies and strategy measures relevant to the forestry sectors which are amalgamated into the broader rural development policy frameworks. Some policies and strategies of other sectors have also significant link to the forest sector. These policies and strategies play crucial roles that determine the extent at which the sector addresses the social, economic and ecological needs of the community to forest goods and services. Although these policy, legal and strategy documents do not directly refer to the issues of REDD+, they have provisions which are relevant for its implementation.

It is important to analyze such legal frameworks in the context of understanding the existing policies, strategies and action programs in view of social and environmental safeguards emanating from the application of REDD+ programs. Among others, the major policy and strategy provisions that are directly and indirectly related to the forest sector include Rural Development Policy and Strategies (RDPS), Forest Conservation and Utilization Policy and Strategy and the Forest Proclamation, the Environmental Policy of Ethiopia, Productive Safety Net Program and Sustainable Land Management, the GTP and CRGE Strategy of Ethiopia. An overview of these legal frameworks and programs are provided below.

10.3.2. The Rural Development Policy and Strategy, 2001

The Federal Democratic Republic of Ethiopia issued a national rural development policy and strategy in November 2001 which is an overarching policy and strategy document that comprised statements in relation to rural development, agriculture and natural resource interventions. The policy underscores agriculture-led economic development as a pathway feasible to Ethiopia in order to ensure rapid economic growth, optimize public benefits, reduce poverty and promote market economy. The major policy directions include efficient use of land resources and formulation of area-specific development packages. Under the pillar stating the need to formulate area-specific development packages, the document underscores the need to rehabilitate degraded lands and forests. The policy suggests that natural resource development and conservation interventions should also serve as source of income to the local community. Especially it underlines on the income which should be accrued from forest development and management activities. REDD+ projects are relevant with this policy statement in that one of the objectives of REDD+ is fetching additional income for the local people. It also stresses on the need to promote target oriented tree planting programs. Specifically, the policy addresses that afforestation interventions should be focused on agroforestry, which allows farmers harvest wood products and fruits that can be sold in the local market and satisfy household demands. The document further deals with increasing agricultural productivity to reduce pressure as output per landholding increases, farmers will be less likely to expand into forests.

Despite this strong policy provisions successes so far are limited. Implementation of this policy is constrained, among others, by lack of implementation instruments, such as, directives or sector-specific guidelines. Moreover, proper amount of financial and human resources have not been allocated for the implementation of afforestation and reforestation programs. For example, Mulugeta Limeneh and Tadesse Weldemariam (2010) reported that forestry sector received less than 10% of the overall budgets allocated to the Ministry of Agriculture both at the federal and regional levels during the last decade. The same is true in the allocation of extension personnel and airtime and print space in the media.

10.3.3. Forest Development, Conservation and Utilization Proclamation 2007

The Forest Development Conservation and Utilization Proclamation No.542/2007 is the latest

forest law presently under implementation. This proclamation attempts to provide legal grounds to the Forest Development, Conservation and Utilization Policy and Strategy of 2007. The proclamation recognizes two types of forest ownerships, state and private forest ownership. The proclamation puts communal forest ownership under the category of private forest ownership. The proclamation is criticized for consisting of penalty articles that lack clarity to lawyers' interpretation. The lack of act and concrete implementation directives have been mentioned as a bottleneck hindering the effective implementation of this proclamation. Though communal ownership right is integrated in private ownership it provides strong accounts to community participation in the development and management of forests.

The proclamation has been in effect since September 2007 but has yet seen regulations or directives/guidelines for its implementation. This includes the directives necessary for the utilization of private forests in general and the preparation of management plans in particular. Communities and small enterprises rarely respect the boundaries of state forests, as they are not consulted in the demarcation process. This is without considering that most of the forests are not demarcated until now. In most cases, no maps or management plans exist and they have not been gazetted due to lack of resources human, financial and material.

10.3.4. Forest Conservation and Utilization Policy and Strategy, 2007

The adoption of this policy by the council of ministers, which is the first in the history of the country, reflects the government's commitment to improve the economic, social and ecological contributions of the forest resource base. The main objective of the policy and strategy is improving the economic contribution of the forest sector and meeting the communities' demands for forest products. Moreover, the policy envisages enhancing the forest sector economic contribution by promoting the engagement of the private sector and farmers. The policy substantiates the need to certifying forest use right which is an important provision to enhance the engagement of farmers, communities and the private sector. The policy also provides statements on the support that should be provided to create market opportunities for forest products. The policy statements in the document are comprehensive enough to promote sustainable forest management and enhance the social and economic contributions of the sector.

This policy and strategy document can be utilized for the implementation of REDD+ as it provides for: possibilities of income generation from forests for the communities; the establishment of participatory forest management schemes by engaging the local people; issuance of forest ownership certificates for individuals, associations (e.g. forest use groups) and private investors.

10.3.5. Environmental Policy of Ethiopia (EPE), 1997

Currently, MEFCC is preparing a revised version of this policy, though a draft document is not ready yet. This is one of the policies developed in the country that has direct relation to forest development and conservation, approved in 1997. The policy aims at improving the quality of life of the people through sustainable development and utilization of natural resources. It also aspires to conserve traditional resource management practices. The policy included soil management and sustainable agriculture, forest and tree resource management, genetic, species and ecosystem biodiversity conservation and management. The EPE has a strong element of encouraging peoples' participation in forest management. The policy addresses the complementary roles of communities, private investors and the state in forestry development. The policy emphasizes the need to restrict forest resources utilization to the regeneration capacity. Thus, the policy attempts to ensure sustainable supply of forest products without disrupting the social, economic and

ecological services.

This policy document also provides for, tenure security on land, investing in SLM technologies and conducting intensive agriculture. Moreover, the Policy stresses the uninterrupted and continuing access to the same land and natural resources (e.g. trees, water, wildlife and grazing) on the part of farmers and pastoralists. It also recognizes the customary rights of access to and use of land and natural resource which are constitutionally acceptable, socially equitable and are preferred by local communities. These provisions of the Policy have shown their relevance for REDD+ as they underline on the security of land tenure; agricultural intensification; sustainable utilization of natural resources; traditional resource management by using local knowledge; communities' participation in forest management; and access rights of local people to natural resources such as forests. From these policy statements it can be understood the rights of local people are not limited to only the landholdings to which they have been provided with the title deeds but could be extended to the forests.

10.3.6. Environmental Impact Assessment Proclamation (EIA) No. 299/2002

The proclamation prohibits implementation of any project that requires environmental impact assessment without authorization from the federal or regional environmental agency. The provisions of this proclamation emphasize on the importance of conducting environmental impact assessment for all development projects and programs which fall in any category listed in any directive issued pursuant to the EIA proclamation. The proclamation indicates that environmental assessment is essential to predict and manage the environmental effects of proposed developmental activities; to harmonize environmental, economic, cultural and social considerations into a decision making process; to implement environmental rights and objectives enshrined in the Constitution; and to bring about administrative transparency and accountability. The definition of EIA in the proclamation includes both project and strategic level assessments and there is no separate law for strategic environmental assessment in Ethiopia. These features of the proclamation make it relevant for the implementation of REDD+. EIA is the most significant law as far as SESA is concerned. Protecting the environment and society from the negative impacts of a proposed project or program by devising safeguard mechanisms (e.g. mitigation measures) is a major purpose of the EIA law. EIA processes hence result in environmental and social safeguards.

Irrespective of its relevance for the REDD+, the enforceability of EIA in Ethiopia is facing a number of challenges. The most significant challenge in the country with respect to implementation of EIA law is the disproportionate emphasis on development projects and programs as compared to their social and environmental impacts. The other challenge that needs to be mentioned is the delegation of the power of reviewing of EIA study reports by the former EPA to the sectoral ministries. The delegation of EIA report reviewing powers of EPA to sectoral agencies has been found to contradict the basic principle of avoiding conflict of interests in assigning the roles and responsibilities of regulation of environmental protection on the one hand and resources development on the other.

This federal level delegation was not accepted by the regional states and in no regional state such delegation has been made. Some regional states (e.g. Oromia) have enacted their own EIA laws. The Oromia Regional State has issued the EIA Proclamation No. 176/2012 on 30 November 2012. It includes both project level and strategic impact assessments. The proclamation is applicable on all projects and programs to be undertaken in the territories of Oromia Regional State. This implies that even federal projects and programs are subject to the proclamation. According to Article 5 (1) of the proclamation, no person shall commence implementation of a project that requires environmental impact assessment without authorization from the Bureau.

There have been improvements in the enforcement of EIA in Ethiopia including in the Oromia Regional State since the adoption of the EIA proclamation in 2012. All projects are required to assess their potential environmental and social impacts before implementation and operation especially since 2012/13. Project proponents, both from the public and private sectors have to submit their EIA report to Oromia Bureau of Land Administration and Environment Protection for review and approval. They cannot implement projects without EIA certificate from the Bureau. There has been attitude change towards increased awareness on EIA. Irrespective of these improvements, there are still problems in enforcing EIA law in Oromia. The problems are mostly related to:

- Proponents usually fail to construct/apply the proposed mitigation measures by using the technology they prescribe in the EIA study report to mitigate or eliminate the negative impacts of their projects;
- As many of the federal projects are located in the territory of Oromia Regional State and as the delegated federal sectoral ministries are not actively exercising their monitoring and evaluation tasks, there is institutional gap in the effectively enforcing EIA in Oromia;
- Lack of effective cooperation among the stakeholders indicated in the Oromia EIA law;
- Lack of efficient mechanisms for dispute resolution and insufficient compensation payments for displacement;
- Still the awareness level on EIA is small in the general public and even in the decision making organs;
- Lack of or weaknesses of sectoral environmental units in the RS;
- Weak institutional capacity;
- Persisting insufficiency of political willingness to EIA. This can be explained as disproportionate urge for rapid economic growth at the cost of the environment.

10.3.7. Productive Safety Net and Sustainable Land Management Program

Productive Safety Net Program (PSNP), which is an operational program targeted to ensure food security was initiated in 2005. The program is now in its fourth phase. The program aims to improve access to safety net and disaster risk management mechanisms, diversified livelihoods and nutrition support for food insecure households in the rural areas. The program recognizes the importance of tackling environmental degradation through sustainable natural resource management as a key tool of sustaining food security. The program intends to promote community based degraded lands rehabilitation initiatives through public works and direct support. Public works are labor-intensive activities that are conducted to restore degraded landscapes. The direct support scheme facilitates the flow of financial or food support to vulnerable households with no able-bodies to participate on public works.

The Ethiopian government also launched Sustainable Land Management (SLM) project in October 2008 with the aim of combating land degradation problems. It was envisioned to contribute to the UNCCD and global action against climate change. The second SLM project aims at reducing land degradation and improve land productivity in selected watersheds in six regions of the country. The watershed management component of the SLM program has been witnessed to bring commendable changes through scaling-up of best land management practices and technologies for smallholder farmers. Farmers are now realizing the benefits of conserving natural resources including forests not only in terms of sustaining increased agricultural productivity but also in terms of livelihood diversification which boosts landscape productivity and enhance resilience. Because of its participatory nature, integrating social and environmental safeguards in watershed approaches is simple. Such integration further guarantees the sustainability of degraded land restoration

interventions.

10.3.8. The Growth and Transformation Plan and CRGE Strategy of Ethiopia

The Ethiopian government launched the Growth and Transformation Plan (GTP) for the period 2010/11-2014/15 with the vision to propel Ethiopia into middle income country status by 2025. The GTP is an ambitious plan that envisages the country's GDP per capita would grow from 378 USD in 2010 to 1271 USD in 2025. The four pillars in GTP are: (i) sustaining faster and equitable economic growth; (ii) maintaining agriculture as a major source of economic growth; (iii) creating favorable conditions for industry to play a key role in the economy; and (iv) building capacity and deepening good governance. The GTP is a strategic framework which builds on strategies which precede it. These are the Agricultural Development-Led Industrialization (ADLI) Strategy (1993) and Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) (2006-2011). It targets 8.1% agricultural growth per year and doubling production of key crops over five year period. It also seeks to reduce degradation and improve natural resource productivity.

During the plan period the rural electrification program aimed to increase the number of towns and rural villages. Moreover, as a result of distribution of improved energy saving biomass it was estimated that about 26,176 ha of forest have been conserved from deforestation and carbon dioxide emissions have been mitigated by about 36,575 tons. In order to promote and realize the country's Green Development Strategy, ongoing initiatives to generate electricity from hydro power and other renewable energy sources has been the strategic directions during the GTP period. In addition new technological innovations have been promised to be utilized to ensure that the energy sub-sector does not emit additional carbon-dioxide. To promote and sustain rural alternative energy development activities, efforts have been made to enhance the capacity and knowledge in this regard of regions, producers and consumers. The distribution of wood saving materials and technologies throughout the country has continued. The GTP is a key plan as far as REDD+ is concerned owing to its contribution to the emission reduction targets from the forestry sector by adopting various mechanism, ranging from agricultural intensification to production and distribution of energy saving cook stoves. Its second phase, GTP II, is currently under public consultation.

It is envisaged that the achievement of this plan will enable the country to reach its Millennium Development Goals. In order to achieve the GTP goals, the government initiated new programs and institutions such as the Agricultural Growth Project (AGP) and the Ethiopian Agricultural Transformation Agency (ATA).

The Climate Resilient Green Economy (CRGE) of Ethiopia is another overarching economic development strategy that was declared to the international community in Durban in 2011. Ethiopia has initiated the CRGE strategy to safeguard the country from the adverse effects of climate change and to build a green economy that will help realize the goals set in the GTP. The CRGE is based on four pillars one of which is protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks. The strategy aims at reversing land degradation, protecting existing forests and increasing forest cover. The fact that the CRGE adopts the forest sector as one of its four pillars provides an enabling environment for the development of the forest sector.

As part of the green economy strategy, the government has selected four initiatives for fast-track implementation in the CERG Strategy document: exploiting the vast hydropower potential; large-scale promotion of advanced rural cooking technologies; efficiency improvements to the livestock value chain; and Reducing Emissions from Deforestation and Forest Degradation (REDD). These initiatives are expected to have the best chances of promoting growth immediately, capturing large

abatement potentials, and attracting climate finance for their implementation.

REDD+ is embedded in CRGE Strategy, which envisions bringing the country to middle income status by 2025 through an environmentally sustainable and climate resilient economy while maintaining zero net greenhouse gas emissions (GHG). The government established the Ministry of Environment and Forest (MEF) in July 2013 with the mandate of facilitating the implementation of the CRGE Strategy, including through development programs in environmental management and forestry. Ethiopia is receiving international support to achieve REDD+ readiness and prepare the country for receiving results-based payments for emission reductions in the forestry sector. The national REDD+ Readiness program - coordinated under the REDD+ secretariat at MEF - intends to serve as a vehicle through which the CRGE objectives on land use and forestry sector. The CRGE Strategy is closely related with the GTP.

10.4. Regional Legal Framework

Article 51 (5) of the FDRE Constitution states that the federal government shall enact laws for the utilization and conservation of land and other natural resources, historical sites, and objects. Likewise, article 52 (2) (d) states that regional states shall have the functions of administrating land and other natural resources in accordance with federal laws. Regional states can enact their own laws facilitating the administration of the natural resources. For instance, the Forest Development, Conservation and Utilization Proclamation No. 542/2005 in its Article 8(3) provides that: “The designation and demarcation of a state forest ... shall be proclaimed by the legislation of the concerned regional state. “This is in addition to the power bestowed upon the regional states by the federal forest law, Article 18 (1), which states that “each Regional State shall have the power to administer any state forest in the region in accordance with this proclamation.”

The FDRE Constitution also provides the regional states with the power to formulate their respective policies, raise their own revenue as well as plan and execute their own forest development activities in accordance with the framework of the overall policies of the federal government. Some of the major laws and regulations of selected regions are indicated in the following sub-sections:

10.4.2. Amhara National Regional State

- Forest Resources Protection, Control and Utilization guideline (No. 002/2007)
- Natural incense and Gum Development, Protection and Utilization Guideline (No 001/2006),
- Rural Land Administration and Use proclamation (No- 133/2006)
- Forestry Development and Protection Task Forces Implementation guideline (July, 2006)
- Woody Biomass Inventory and Strategic Planning Project January, 2002
- Amhara Forestry Action Program (AFAP, 1999)
- Regional Conservation Strategy (1999)
- Rural Land Distribution Guideline for Forestry Investment (Amhara Regional State Executive Committee January, 1997)

10.4.3. Tigray National Regional State

- Tigray Forestry Action Program (1996)
- Management guidelines for developing natural gum and olibanum resin bearing trees species (1998)
- Strategic plan for the sustainable development, conservation and management of woody

biomass resources (2004)

10.4.4. Oromia National Regional State

- Oromia forest proclamation no 72/2003,
- Regulation to Provide for the Establishment of the Oromia Regional State Forest Enterprises Supervising Agency, No 84/2007.

10.4.5. Southern Nations and Nationalities and Peoples Regional State

- Southern Nations, Nationalities and Peoples Land Administration and Use Proclamation No. 110/2007
- SNNPRS Rural Land Administration and Use Regulation” No 66/2007 issued to implement Proclamation No. 110/2007
- The Southern Nations, Nationalities and Peoples Regional State Forest Development, Conservation and Utilization Proclamation No. 147 /2012

10.5. Institutional and policy challenges in the forest sector

The forest sector of Ethiopia is known as a victim of frequent institutional restructuring that has been made over the last three decades. During the 1980s, the forestry department consisted of around 60 staff. Having the biggest institutional setup over the history of the country before 2013, it had been re-organized as a Ministry in 1995 having about 300 employees. Downsized during the restructuring in 2014 when it was merged with the Ministry of Agriculture it had less than 10 foresters. It was structured as a case team in the Natural Resource Management Directorate of MoA. This structuring could not allow provision of technical supports to regional bureaus besides its clear impacts on resource allocation and emphasis. Moreover, such weak institutional arrangement constrains effective coordination of regional activities towards national goals and international commitments. Inter-regional learning platforms and experience sharing forums can also be best planned and utilized with a strong federal institution put in place. Above all, equitable development of the community necessitates strong capacity building support to regions that need special support. Recognizing all these benefits and the potential of the sector to the national economic goals and in particular its key roles in sustaining food security, the government of Ethiopia established MEF in 2013. It can be said that MEF is now an institution with adequate institutional setup to run the sector achieves the expectations. However, the present lack of regional complementary institutions remains a challenge that should be underlined.

Generally, there are as such no criticisms that blame lack of policy as a challenge against forest development and conservation in Ethiopia's. When sectoral and cross-sectoral policies related to natural resources are taken together, there are several documents largely waiting for implementation. Benefiting from inputs of senior expertise through series of workshops, the policy documents and programs are comprehensive enough to effectively and efficiently guiding the sector. However, some scholars raise some issues lack clarities. Some argue that the policies, strategies and implementation programs either lack monitoring and evaluation framework or they are not properly implemented. The Forest Development, Conservation and Utilization Proclamation No. 2007 enlists the provisions of incentives (provision of land for lease free, income tax waiver for a grace period of one cycle of harvest) for private investors in forestry. The Rural Land Administration and Land Use Proclamation no. 456/2005 defines land use plan as "rural land use practice whereby the options that give greater economic benefits without causing land degradation and environmental pollution are, determined and implemented from among the different use options a rural land can be given on the basis of physical, economic and social information" and stating the need to develop a guiding land use master plan, ground level implementations are lacking. Absence of land use plan is one of the bottlenecks that have led to the conversion of huge forest lands into agricultural lands. Though the Environment Policy puts some conducive policy elements that support the development of the forest sector, its weak implementation has not allowed that.

REDD+ by its nature requires strong and coordinated institutions that perform their REDD+ duties in a concerted manner to oversee various activities affecting the forestry sector across the different levels of government. This functionally linked institutional structure needs to effectively administer a decentralized program that involves multiple sectors and numerous local participants. Institutional arrangements will need to integrate government oversight and implementing institutions, decentralized at regional, zonal, and local (Woreda and Kebele) levels, with functions for multi-stakeholder and technical consultation.

10.6. Other Policies related to REDD+ Implementation

10.6.2. National Energy Policy -1994

This policy targets at ensuring energy self-sufficiency or meet national energy security. The policy underlines that all energy development activities should be environmentally friendly. It recognizes the promotion of alternative energy sources in order to increase energy supply that has to meet the country's growing demand. It also accounts to the pressure on the biomass energy source and states on the need to increase the biomass energy source through afforestation, re-forestation and agroforestry schemes.

The policy indicates that Ethiopia's energy consumption predominantly based on biomass energy sources, which led to massive deforestation and the resultant land degradation in the country. To overcome these problems, the policy provides for the importance of devising mechanisms to arrest deforestation to increase the reliability of energy supply and to control environmental pollution resulting from energy use. It also emphasizes on the participation of the private sector and communities, particularly women in the development of energy and payment of due and close attention to ecological and environmental issues during the development of energy projects. Alternative energy development from solar, geothermal, wind energy sources are among the renewable energy sources with the view to relieving pressure on wood resources.

The National Energy Policy is a relevant policy instrument for the application of REDD+ in that it focuses on the renewable energy sources and in energy efficiency approaches. The materialization of the policy will have a positive contribution in reducing emissions from deforestation and forest degradation. It will also contribute in the enhancement of forest development.

10.6.3. Ethiopian Water Resources Management Policy-1999

The policy states the need to ensure sustainable supply of water which necessitates natural resources development interventions in the upper catchments. In line with ensuring the sustainability of water supply the policy clearly states that "*Ensure that water resources management is compatible and integrated with other natural resources as well as river basin development plans and with the goals of other sectoral developments in health, mines, energy, agriculture, etc.*" In its section of the provision on cross cutting policy issues the document addresses environmental issues with two statements. Section 2.2.2-A states that:

- Incorporate environment conservation and protection requirements as integral parts of water resources management.
- Encourage that Environment Impact Assessment and protection requirements serve as part of the major criteria in all water resources projects.

Moreover, section 2.2.2-B which deals about watershed management states that:

- Promote practices of efficient and appropriate watershed management to maximize water yields and quality.
- Ensure that watershed management practices constitute an integral part of the overall water resources management.

Thus the water policy can be understood as well aligned with the natural resource management activities including the present massive public mobilization schemes of the government targeted to implement integrated watershed management development initiatives.

10.6.4. Proclamation for Development, Conservation and Utilization of Wildlife

Proclamation No 541/2007 recognized that the unplanned and inappropriate utilization of wildlife and the hitherto protection measures were found to be unsuccessful. The aim of the proclamation is to enhance the contribution of the sector to the national economy and the local community by putting sustainable wildlife resources management in place. It states that the management and utilization of wildlife resources should be in line with the international conventions and agreements the country made. It also recognizes the need to enact laws in conformity with the federal arrangement. Moreover, it provides adequate provisions to the engagement of the local people and the private sector. The Proclamation vests the power of wildlife administration in both the Federal and Regional Governments. National parks that are nationally and globally significant and known to have representative ecological zones and embrace great diversity of wildlife; national parks and wildlife sanctuaries that are inhabited by the country's endemic and endangered species; any wildlife conservation areas geographically situated within two or more regions; any trans-boundary wildlife conservation areas that may be established in accordance with agreements with neighboring countries shall be designated and administered by the Federal Government.

The Ethiopian Water Resources Management Policy of 1999 got a more detailed strategy, the Ethiopian Water Sector Strategy, in 2001. This strategic document provides for afforestation to enhance water infiltration into the soil and reforestation to ensure long life of hydro dams by minimizing siltation. In addition to these positive provisions for REDD+, the strategy also provides for draining of all wetlands in the country. (4.1.1 (8)) Drainage of wetlands is not only destructive ecologically but also will negatively impact on REDD+ programs as their drainage would lead to further carbon emissions.

10.6.5. Law on Expropriation of Landholdings for Public Purposes and Payment of Compensation

The Federal Rural Land Administration and Utilization Proclamation No. 456/2005 recognizes the land use rights of private persons, communities, governmental and nongovernmental organizations. These organs can be issued landholding certificates for definite or indefinite period of time.

Expropriation of landholdings for public purposes and payment of compensation proclamation 455/2005 gives power to lower level administrative institutions such as Woredas to seize rural or urban holdings for public purposes. The law includes statements on how land can be leased to investors. The law issues compensation mechanisms not for the land as such, as the land belongs to the state, but for property situated on the land and for permanent improvements made to the land.

The Compensation Proclamation is issued with the view to defining the basic principles that have to be taken into consideration in determining compensation to a person whose landholding is going to be expropriated. The Proclamation is applicable on both rural and urban lands. The general condition for which land and property can be expropriated is for public purpose defined as use of land by the appropriate body or development plan to ensure the interest of citizens to

acquire direct or indirect benefits from the use of the land and to consolidate sustainable socio-economic development.

According to the Compensation Proclamation, a landholder is an individual, government or private organization or any other organ that has legal personality and in lawful possession over the land to be expropriated and owns property situated thereon. (Article 2 (3)) Compensation is paid to those who have legally occupied the land and those who have property on such land developed through their labor and capital. Lawful occupants are expected to produce evidence for their legal landholding. The most important evidence for this could be the landholding certificate. However, all rural landholders may not produce landholding certificates as the issuance of such certificate has not yet covered all rural landholders in the country. In the regional states where landholding certificates have not been issued for all of the rural landholders, those who occupied land customarily or other legal means are eligible to compensation payments.

A rural landholder whose landholding has been permanently expropriated (where substitute land is not available) shall be paid displacement compensation, in addition to compensation payable for property situated on the land and for permanent improvements made to such land, which shall be equivalent to ten times the average annual income s/he secured during the five years preceding expropriation of the land.

On the basis of Proclamation No. 455/2005 Article 7 for expropriation of landholdings for public purposes, compensation will be made at replacement cost. With this method of valuation, depreciation of structures and assets will not be taken into consideration. Compensation rates and valuation of properties are based on a nationally set formula based on data collected from local market assessments.

Valuation of property is done by certified institutions or individual consultants on basis of a valuation formula determined at the national level or, where such capacity does not exist, by a committee composed of five persons (in rural areas) designated by the Woreda or city administration. Procedures for valuation are to be determined by specific regulations or directives. To this end, the Council of Ministers issued a Regulation No. 135/2007 Payment of Compensation for Property Situated on Landholding Expropriated for Public purposes. Some regional states also issued further details through directives.

Regarding procedures for expropriation, the law requires that the expropriation order has to be given prior to relocation. Such order shall not be less than 90 days before relocation; however, if there is no crop or perennial plant, farm land could be expropriated within 30 days of receipt of the expropriation order. The law regulates that compensation has to be paid before relocation. With respect to grievance redress, complaints are addressed by a grievance committee established by a Woreda or city administration. The second level of grievance is a Woreda or municipal appellate court and the decision of the court will be final. According to the law, execution of an expropriation order will not be delayed due to complaint regarding compensation payments.

Both the proclamation and the regulation can serve as safeguard systems as determined by the Cancun Agreement. (Decision 1/CP.16, Appendix 1)The Cancun safeguard principles include, addressing transparency, participation of stakeholders, protection of biodiversity and ecosystem services, and respect for rights of underserved and local communities. The expropriation and compensation proclamation and regulation can be applied by implementing these safeguard principles, especially in the respect and protection of the rights of underserved and/or local

communities during the implementation of REDD+.

10.6.6. Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation No. 482 /2006

This proclamation deals with access to genetic resources (by communities), community knowledge and protection of these rights with the objectives to ensure the communities right to the benefits accrued from genetic resources and community knowledge. It provides communities with the right to regulate access to their community knowledge; an inalienable right to use their genetic resources from their surroundings. The proclamation addresses key issues such as access rights, obligations, and types of benefit and benefit sharing principles.

The proclamation recognizes that ownership of community knowledge is vested in the concerned local community. The recognition of the right of knowledge of communities on genetic resources can also be applicable in the forest management. As it has been indicated in a number of studies, the full and effective engagement of local communities and the incorporation of their traditional forest knowledge in forest management strategies are crucial for REDD+ success in curbing climate change. It is widely accepted that local communities have developed significant bodies of knowledge on how to cope with local climatic shifts including agricultural techniques for managing and conserving forests, water, and soil resources. These practices can guide the REDD+ projects and programs.

10.6.7. Gender Mainstreaming Policies and Strategy

Women constitute a significant segment of the general population of Ethiopia. However, because of the socio-political oppression and the dragging cultural practice imposed upon them for centuries, they were marginalized from participating and benefiting from the economic development of the country. Nevertheless, the government has been making steady affirmative actions and achieved remarkable results. There has been made steadily by gender mainstreaming recognized as a strategy for making concerns and experiences of women and men to be an integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres. Cognizant of their roles in tackling gender inequalities, The Federal Democratic Republic of Ethiopia entered into commitments to implement different international conventions and protocols on women's rights. It has adopted the Convention on the Elimination of All Forms of Discrimination against Women /CEDAW (1979), Declaration on the Elimination of Violence against Women /DEVAW (1993), the International Conference on Population and Development /ICPD (1994), and the Beijing Platform for Action /BPA (1995). Moreover, broad and specific policies, legal frameworks, and strategies have been put in place along with defined objectives.

The constitution of Ethiopia states several provisions in support of gender mainstreaming. Article 25 of the constitution states that all persons are equal before the law and discrimination on grounds of sex is prohibited. Similarly, Article 35(8) stipulates men's and women's equality in employment, promotion, pay, transfer, and pension entitlement. Furthermore, Article 35(3) of the constitution identified itself with women's historical legacy of the past and clearly states the retroactive positional truth by way of prescribing an affirmative action as a remedy to the women's discrimination. Article 42 (1) (d) of the constitution stipulates women workers right to equal pay for equal work. The National Policy of Women which is enacted in 1993 puts multi-

sectoral development strategies that address the needs of women. The policy also shows the government's commitment to abolish all discriminatory laws and regulations as well as creating enabling environment for the full participation of all members of the society in the socio-economic and political sectors, with special focus on the subordinated position of women.

The Ethiopian government has also issued several proclamations that safeguard the rights of women. For instance, the labor law proclamation N0.377/2003 has clearly stipulated different provisions to safe guard women's right upon the formation of employment contract. The section of the proclamation that deal with working conditions of women and young workers, article 87, prohibits discrimination of women on the basis of their sex on payment and employment. Article 88 grants maternity leave without deducting her wages. The entitlement for affirmative actions and maternity leave for civil servant women is covered by the civil servant proclamation N0.515/2007. The Developmental Social Welfare Policy was formulated by the Ministry of Labour and Social Affairs in November 1996. The Policy acknowledges that war, famine and the economic crises of the past decades have harmed vulnerable groups, i.e., women, the elderly, children, youth and the disabled. It also explains that women are underrepresented in every sphere, including education, employment, politics and other key decision-making positions. The Policy also highlights the significance of gender mainstreaming in all programmes, projects and services. Ethiopian Women's Development and Change Package (EWDCP) 2006 is a strategy document designed to implement the ideals provided in the FDRE constitution. The package clearly states the commitment of the government to enhance women's socioeconomic benefits and puts that the major forces to women's problems are women themselves. The first GTP of Ethiopia has also provided adequate provisions to address women and youth issues to accelerate gender issues. With these several policy and legal provisions to gender mainstreaming it is legitimate to formulate a safeguard system that guarantee equal benefit sharing for the women and the youth from all interventions made in the forest sector.

10.6.8. Legal Framework for Underserved and Vulnerable Groups meeting OP4.10 requirements

The GoE, under the constitution and in the various policies and strategies stemming from these constitutional rights, including the GTP, also recognizes a number of disadvantaged groups who face particular challenges in accessing their rights and entitlements as citizens, including basic services. (MoFED 2010, WaterAid, 2013). These include pastoralists and other designated disadvantaged nations and people living with disabilities or HIV/Aids.

Disadvantaged Nations, Nationalities and Peoples, Pastoralists, and National Minorities: The Ethiopian Constitution¹⁸ recognises the presence and rights of many ethnic groups, as well as vulnerable groups, including Nations, Nationalities and Peoples, pastoralists, and national minorities. Article 39 recognizes the rights of groups identified as "Nations, Nationalities and Peoples" and defines them as "a group of people who have or share a large measure of common culture or similar customs, mutual intelligibility of language, belief in a common or related identities, a common psychological make-up, and who inhabit an identifiable, predominantly contiguous territory." This represents some 75 out of the 80 groups who are members of the House of Federation, the second chamber of the Ethiopian legislature. The Constitution recognizes

¹⁸ http://www.wipo.int/wipolex/en/text.jsp?file_id=234349

the rights of these Nations, Nationalities and Peoples to: self-determination, including the right to secession; speak, write and develop their own languages; express, develop and promote their cultures; preserve their history; and, self-government, which includes the right to establish institutions of government in the territory that it inhabits and equitable representation in state and Federal governments. In addition, as a signatory of the African Charter of Human Rights, Ethiopia has committed to protecting the rights of all peoples to progress social, cultural and economic development of their choice in conformity with their identity (Articles 20 and 21)²¹. A significant proportion of these groups live in the emerging regions and locations which are particularly underserved by WaSH services (NWI, 2013; Social Assessment Report for WaSH, 2014).

The Government of Ethiopia recognises another group called “national minorities”. Article 54 of the Constitution explains that: “Members of the House (of Peoples Representatives), on the basis of population and special representation of minority Nationalities and Peoples, shall not exceed 550; of these, minority Nationalities and Peoples shall have at least 20 seats.” These groups have less than 100,000 members and most live in the Developing Regional States and pastoralist areas. This is the case for the Opuo and the Komo in the Gambella region, and the Bacha and the Birale in SNNPR.

The Ethiopian Constitution also recognises the rights of pastoralist groups (Articles 40 and 41). This includes the right to “free land for grazing and cultivation as well as the right not to be displaced from their own lands” and the right to “receive fair prices for their products, that would lead to improvement in their conditions of life and to enable them to obtain an equitable share of the national wealth commensurate with their contribution. This objective shall guide the State in the formulation of economic, social and development policies.” Additionally, Article 89 of the Constitution states that the “Government shall provide special assistance to Nations, Nationalities and Peoples least advantaged in economic and social development.” This includes people in the emerging Regions, as well as the social and spatial peripheries of two developed states (SNNPR and Oromia).

The pastoralists comprise approximately 12-15 million people that belong to 29 groups of Nations, Nationalities and Peoples²². Pastoralist regions/areas recognized by the government are: Afar; Somali; Borena Zone and Fentele Wereda (Oromia); South Omo Zone, Bench-Maji Zone, and parts of Decha Wereda in Keffa Zone (SNNPR); and, Nuer Zone (Gambella). Whilst government policies have strengthened and resource allocations increased over the last decade²³, pastoralist areas are still amongst the least served by WaSH services, as the discussion above on spatial disparities highlighted. The environmental challenges in securing water on a continuous basis are compounded by poor infrastructure and low institutional capacities. Particularly in Somali and Afar where water resources are considered the highest priority development activity, due to both the scarcity of water in the region and the importance of water to the livelihood of pastoralist communities (Nassef et al., n.d). Access to water is contentious: it can trigger or feed other conflicts such as disputes over land or grazing and can exacerbate tensions during periods of drought or water stress. (McGregor et al, 2012; Social Assessment Report for WaSH, 2014).

10.6.9. World Bank Safeguard Policies

21 <http://www.humanrights.se/wp-content/uploads/2012/01/African-Charter-on-Human-and-Peoples-Rights.pdf>

22 Pastoralist Forum Ethiopia, <http://www.pfe-ethiopia.org/about.html>

23 PASDEP (2005 -2010), the previous five year poverty reduction plan to GTP promoted more targeted assistance to underserved areas – the emerging regions and pastoralist/agro-pastoralist areas (MOFED 2010).

The World Bank safeguard policies are designed to help ensure that programs proposed for financing are environmentally and socially sustainable, and thus improve decision-making. The Bank's Operational Policies (OP) are meant to ensure that the Bank does not finance projects that will have irreversible major adverse impacts or cause significant harm to the people and their environment. The Safeguard Policies are lumped into Environment, Social and legal. These operational policies include:

- Environmental Assessment OP/ BP 4.01. In World Bank operations, the purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted.
- Natural Habitats OP/BP 4.04. To promote environmentally sustainable development by supporting the protection, conservation, maintenance, and rehabilitation of natural habitats and their functions. Use a precautionary approach to natural resources management to ensure opportunities for environmentally sustainable development. Determine if project benefits substantially outweigh potential environmental costs.
- Op 4.36: Forest The objective is to realize the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and global environmental services and values of forests. Ensure that forest restoration projects maintain or enhance biodiversity and ecosystem functionality and that all plantation projects are environmentally appropriate, socially beneficial and economically viable.
- OP 4.09: Pest Management Support integrated approaches to pest management. Identify pesticides that may be financed under the project and develop appropriate pest management plan to address risks. If pesticides have to be used in crop protection or in the fight against vector-borne disease, the Bank-funded project should include a Pest Management Plan (PMP), prepared by the borrower, either as a stand-alone document or as part of an Environmental Assessment.
- OP 4.10: Indigenous People; the Ethiopian government recognizes that all people in Ethiopia are indigenous and there are only underserved communities. 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. There is a complex relation between local underserved people and natural resources, which they depend on for their livelihoods, spiritual and cultural practices and hence the Bank recognizes this relationship with due regards.
- OP 4.11: Physical Cultural Resources Investigate and inventories cultural resources potentially affected. Include mitigation measures when there are adverse impacts on physical cultural resources or avoid if possible.
- OP 4.12: Involuntary Resettlement Assist displaced persons in their effort to improve or

at least restore their standards of living. Avoid resettlement where feasible or minimize. Displaced persons should share in project benefits. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. The policy prescribes compensation and other resettlement measures to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments prior to Bank appraisal of proposed projects.

10.6.10. International Commitments

Ethiopia declared its Climate Resilient Green Economy strategy (CRGE) to the international community in Durban in 2011. The CRGE strategy envisages promoting enclosures via rehabilitation of degraded pastureland and farmland, leading to enhanced soil fertility and thereby ensuring additional carbon sequestration. Moreover, the CRGE set afforestation and re-forestation targets of 3 million ha and sustainable management of 4 million ha of high forests and woodlands by 2030. Another recent international pledge that Ethiopia committed to the rest of the World is the New York Pledge. In the New York declaration of 2014, Ethiopia pledged to restore 15 million ha of land by 2030. Realizing these international commitments require robust governance mechanisms that address environmental and social safeguards and ensure equitable community benefit sharing. As it was also mentioned in other sections of this study Ethiopia is a signatory or member of several international commitments.

11. Institutional Review

Under institutional review, pertinent institutions that are directly or indirectly working in the REDD+ process particularly and have major role in implementing the safeguard instrument were reviewed. The reviewed institutions were from government, non-government, and partner organizations.

11.2. Federal Institutions Review

11.2.2. Ministry of Environment, Forest and Climate Change (MEFCC)

In 2013, the former Environmental Protection Authority (EPA) and the forest sector, which was housed in a team at the Ministry of Agriculture joined together and MEF is established as a new Ministry. The Ministry is mandated to implement the Climate Resilient Green Economy strategy (CRGE) through coordination of environment and forest development programs and related issues.

The first 5 years CRGE strategy which was prepared and deployed since 2011 by the Federal Government of Ethiopia has given a due emphasis to the reduction of greenhouse gases emission and promotion of non-carbon emitting technologies. To this effect, among others, protection of the existing natural forests and promotion and development of new forests through afforestation/ reforestation schemes and enhancing their economic and ecosystem services, including carbon stock are deploying through various means including reduce land-degradation and watershed management throughout the country. REDD+ is also selected as one of the tools designed to ensure the attainment of the desired goal (FDRE, 2011).

The REDD+ process is undergoing since 2008 with the activities being executed by former Environmental Protection Authority (EPA). The Authority has hosted REDD+ process until July 2013 and the National REDD+ Secretariat Office was housed in the Ministry of Agriculture (MoA). In July 2013, the National REDD+ Secretariat is transferred into the newly established Ministry of Environment and Forestry (MEF). Currently, MEF through its REDD+ Secretariat coordinates and facilitates the REDD+ process and programmes in the country by bringing all stakeholders on board.

As a member country of the World Bank Forest Carbon Partnership Facility (FCPF), and as an official observer of the UN-REDD Programme Policy Board Ethiopia has benefitted from the national REDD+ programme fund through the FCPF Readiness Fund and capacity building support and funding from the UN-REDD programme.

The REDD+ Secretariat which is mandated to undertake the coordination and implementation of the National REDD+ activities already finalized and made approved R-PP (Readiness Preparation Proposal) and other related issues by FCPF. The REDD+ Secretariat is organized under the Forest sector of the two major technical wing of the Ministry.

11.2.3. Ministry of Agriculture and Natural Resources (MoANR)

The Ministry of Agriculture and Natural Resources is the main institution for managing the agriculture sector. The agriculture sector is the largest sector in Ethiopia as more than 80% of the population is agrarian. The Ministry was also responsible for the forestry sector until July 2013. Since 1991, the MoANR has been leading the government policy of Agricultural Development Led Industrialization (ADLI) aimed at accelerating national development and reducing poverty and food insecurity in rural parts of the country. In 2011, the MoANR took over the responsibility for planning and implementing the national REDD+ program from the Environment and Protection Authority (EPA) and it was a sit for the REDD+ Secretariat. Ministry of Agriculture is one of the key institutions involved in

implementing the Climate Resilient Green Economy (CRGE), as agriculture and forestry are the two main sectors to be targeted by the CRGE for reducing current and future emissions levels, and also for sequestering carbon emissions.

As per Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia Proclamation No. 691/2010, the Ministry, among other things, formulates and facilitates the implementation of a strategy for natural resources protection and development through sustainable agricultural development; follows up and provides support in the establishment of a system involving rural land administration and use, and organize a national database; and ensures the proper execution of functions relating to agricultural research, conservation of biodiversity and the administration of agricultural investment lands entrusted to the federal government on the basis of powers of delegation obtained from regional states.

At this time in point, the Ministry is undertaking the preparation of the national master land-use planning by establishing the national land use planning committee. The functions of the committee include: formulating and updating the national land policy; preparing the national land-use master plan; coordinating land-use planning activities between and among national and regional levels; and defining land-use needs and priorities.

MoANR is considered as a key actor and important stakeholder for the implementation of the REDD+ process in Ethiopian context as its crosscutting functions, especially its roles on enhancing land productivity, land-use planning, land certification and natural resources management such as watershed management have a direct implication on the REDD+.

11.2.4. Ministry of Finance and Economic Cooperation (MoFEC)

The Ministry of Finance and Economic Cooperation (MoFEC) is a pivotal institute mandated to govern the economic and financial sector of the country. It initiates policies that ensure sustainable and equitable economic development in cooperation with the concerned organs, manage the economy by monitoring the implementation of such policy and submit reports on the performance of the economy. The Ministry manages and coordinates the bilateral economic cooperation as well as the relationship with international and regional organizations setup to create economic cooperation; follows up the impact of the same on the performance of the country's economy; mobilizes, negotiates and signs foreign development aid and loans, and follows up the implementation of the same. (Federal Negarit gazette. Proclamation No. 691/2010). It also administers national and international accounts, including bilateral aid funds. It is the authoring institution behind the Growth and Transformation Plan (GTP) 2010/11-2014/15 and it developed the Climate Resilient Green Economy Strategy (CRGE) together with the Prime Minister's Office and the Environmental Protection Authority since 2009-2011. It is also mandated to administer and oversee the CRGE Facility and is a member of the REDD+ Steering Committee.

11.2.5. Ethiopian Agricultural Investment Land Administration Agency (AILAA)

This is a newly established agency, Ethiopian Agricultural Investment Land Administration Agency, by a regulation of the Council of Ministers (Regulation No. 283/2013). The main objective of the Agency is transferring land for large-scale commercial agriculture. The amount of land it is going to transfer is 5000 ha or more. But it can also transfer even less than 5000 ha if administering that land seems to be feasible. Fertility, topography, its access to road, etc. are some of the parameters for the feasibility. Other major objectives of the Agency include:

- Administering agricultural investment lands entrusted to the federal government on the basis of power of delegation obtained from regional states. The delegation was made by the regional states through a contract signed by each regional state and the federal government as contracting parties.
- Organize and administer agricultural economy zone²⁴.

The most significant challenge in the functions of this Agency regarding forest is – there is a big gap of forest demarcation. In principle, the Agency does not even ‘touch’ certain land if it is demarcated as forest land. But the concerned organ needs to demarcate forests. The problem in this country is most of the forests are outside the demarcated boundaries. Even in the so called demarcated forests, it is difficult to find the boundaries. From this, it can be realized that demarcation can save forests from being cleared for agricultural purposes. This can also mean that – if forests are left without demarcation, there is a risk that they can be included in the agricultural land bank.

The problem here is “what to do with the logs when forests are cleared by investors?” There is no clear direction as what to do with the logs. The investors usually demand to convert it into forest products. This Agency does not allow any value adding process on the logs. Until there is a clear direction on the fate of the logs and other parts of the forest, now the choice is to use them as hedgerow to demarcate some boundaries. The laborers and other workers of the investment projects use the logs as firewood. It is observed and reported that investors also use the logs for various construction works. As there is no clear direction, the Agency does not stop them from doing so.

The identification of the land to be transferred to large-scale agricultural investors is made by a group of experts from various sectors. The experts study the land suitability for agriculture. This includes the collection of socioeconomic and biophysical data. The sectors which contribute experts include:

- Ethiopian Investment Agency
- National Soil Laboratory
- Ethiopian Institute for Agricultural Research
- Investment commissions of regional states
- Regional agricultural bureaus
- Environmental protection and land administration and use bureaus of regions
- MEFCC
- MOANR
- Woreda agricultural and other offices

After the lands are identified by these experts, they are registered in the land bank. When investors come, they are informed about the availability of the lands with their respective locations. After

²⁴ Agricultural economy zone is a land furnished with infrastructures necessary to create conducive atmosphere for investors. (Article 2 (6) of Regulation No. 283/2013)

receiving the land, an investor is expected to produce the EIA study report within three months. The EIA study reports are reviewed by the Agency staff. For the questions as to their capacity to conduct the review, their response were in the affirmative i.e. they claim that they can effectively conduct the review. But for the questions of how many staff and the specialization of the same, they declined to give sufficient information. They generally responded that they have now a better capacity as compared to the bygone times as far as reviewing EIA is concerned.

In the review process, they check the EIA document for considering issues like:

- The farming activities should be 500 meters far from riverbanks;
- How the slope areas are going to be managed (according to the land laws of the federal as well as the concerned regional state);
- Camp sites for workers need to be far from the local people's settlement areas;
- The number of trees that should be left on the farms (but in a manner that does not disrupt the activities of machines);
- Investors need to respect local culture;
- Provide training for their workers on safety precautions; etc.

Even if the investors are smart enough in including such criteria in their EIA study report, there is serious problem in actually implementing as they have stated in the EIA document. This is the biggest challenge as far as EIA is concerned. The Agency periodically sends its staff to the agricultural investment sites for monitoring and evaluation. However, the weak enforcement problem on the side of investors is not yet solved.

The AILAA has significant roles in the REDD+ process as it is a major organ in administering vast tracts of land allocated for investment purpose. For effective implementation of REDD+, the forest lands and the lands allocated for agricultural investment need to be clearly distinguished. As indicated under Article 6 (1) of Regulation No.283/2013, AILAA has to exercise its powers in seriously identifying the lands which are going to be transferred to its jurisdiction are free from other activities, like the REDD+ activities.

11.2.6. Ethiopian Biodiversity Institute

The Biodiversity Conservation Institute is initially established to rescue the country's plant genetic resources from adverse impacts of various human activities and natural disasters and supporting crop improvement programs. Broadening its mandate and duties reestablished to implement Ethiopia's obligation to the CBD.

As part of the CRGE Strategy, REDD+ is a policy incentive aimed at promoting forest and biodiversity conservation and enhancing carbon stocks. Hence, the implementation of REDD+ in the country help the institute to realize its target of conserving the forest genetic resources and the institute with its expertise and experience can support in capacity building and other fields.

11.2.7. Ethiopian Wildlife Conservation Authority (EWCA)

Ethiopian Wildlife Conservation Authority (EWCA) is one of the stakeholders for the implementation of the REDD+ process in Ethiopia. It is a governmental organization under the Ministry of Culture and Tourism. The Authority is given the mandate to work on conservation and sustainable utilization of wildlife in Ethiopia. Hence, EWCA works closely with national and international stakeholders on wildlife conservation. In its present form and organizational structure the Authority was established in accordance with Ethiopian Wildlife Development and Conservation Authority Establishment Proclamation No. 575/2008.

11.2.8. Environmental Protection and Forestry Research Institute

The Environmental Protection and Forestry Research Institute is a government research institution, established by the Council of Ministers Regulation No. 327/2014, mainly focusing on scientific research concerning forestry science. The forestry wing of the institute has 35 Permanent Research Stations in the country. The forestry research wing of the institute is expected to be involved in research for the national REDD+ program and in the implementation of the REDD+ Monitoring, Reporting and Verification (MRV) Roadmap. The Forestry Research Centre is a member of the REDD+ technical committee and playing significant professional role in the REDD+ process supporting the secretariat office.

11.3. Regional and Zonal Government Institutions

11.3.2. Oromia Forest and Wildlife Enterprise (OFWE)

Oromia Forest and Wildlife Enterprise (OFWE) is a government enterprise which is established by Oromia Regional State Forest and Wildlife Enterprise Establishment Regulation No. 122/2009 to administer forest and wild life resources that exist in Oromia region which is the largest region in Ethiopia. The enterprise owns and manages 1,752,489.32ha of forest in 43 forest areas. It is expected that this figure will increase significantly as OFWE is currently conducting demarcation of more forests including woodlands. The forest types managed by the enterprise are both commercial/cultivated forests and natural forest. The enterprise works with communities and NGOs to make the forest resource conservation efforts more effective. The enterprise is playing significant role in implementing Participatory Forest Management (PFM) that harmonizes community and forest enhancing the livelihood of communities in different parts of the region.

Thus, the enterprise works to ensure conservation, sustainable development and the use of forest and wildlife resources in its concession areas through community participation; to ensure supply of forest products to domestic and international markets by enhancing the forest industry; and subsequently contribute to regional and national socio-economic development endeavors.

The enterprise is dedicated for REDD+ process implementation in the country and is becoming exemplary for other regions. The government of Ethiopia recognized “The Oromia Forested Landscape Project” as a Jurisdictional REDD+ pilot Program under auspices of its national REDD+ readiness process. OFWE has also been selected to host the Oromia REDD+ jurisdictional program, which is also known as Oromia Forested Landscape Project. To facilitate the implementation of the Oromia REDD+ program, a semi-autonomous unit, the Oromia REDD+ Coordination Unit is established which is accountable to the Office of the President of the Oromia Regional State. Even before the establishment of the Unit at the sub-national level, the first national REDD+ pilot project known as the Bale Mountains Eco-Region REDD+ project, was implemented by the Enterprise, in collaboration with Farm Africa and SOS Sahel with lots of success stories.

11.3.3. Regional Agriculture and natural Resources Bureaus

Regional Agriculture bureaus and the respective zonal departments are important government organization that REDD+ secretariat and the regional REDD+ coordination unit acquire their collaboration for the success of REDD+ implementation at grassroots level. The agriculture bureau plays significant role in promotion and dissemination of agricultural inputs that enhance the livelihood of communities both encompassed in REDD+ scheme and out of REDD+ scheme. The bureau and the zonal department as well as experts at Woreda level can provide technical support and capacity building training and can facilitate coordination among role players. It also play significant role during environmental & social assessment large scale agricultural investment.

11.3.4. Regional Rural Land Administration Bureaus

In most of regional structures the bureau is delegated to administer rural lands of the region and to undertake environmental protection issues in the region. Watershed management which is a priority agenda for the government of Ethiopia is implemented by these bureaus in collaboration with agriculture bureaus. Investment activities in regions require environmental and social impact assessments and the environmental impact assessment study reports need to be reviewed and endorsed by these bureaus and/or the respective zonal offices. These bureaus may be used to commence climate change mitigation and adaptation issues in the regions. Thus, the bureaus and respective offices at Woreda level play significant roles in the implementation of REDD+ process. Rural land administrations, including the issuance of landholding certificates are handled by the Woreda rural land administration and environmental protection offices in most regions of the country. During REDD+ implementation at grassroots level forests and other lands, community ownership certification is processed by the respective Woreda office.

11.3.5. Women, Children and Youth affair Bureau

Women and children are the most vulnerable community groups especially in rural parts of Ethiopia. It has become clear that any development endeavor that doesn't participated women is unsustainable. Regional women, children and youth affair bureau with its respective office at Woreda level is involved in assisting these community groups. The REDD+ process benefits the women and children through livelihood opportunities that will arise from the REDD+ implementation. Thus, office coordinates the participation of women that involve in the REDD+ implementation at different level (from regional to Kebele levels).

11.3.6. Cooperative Promotion Agency

Cooperative Promotion Agency is a government structure in the regions. It is mandated to organize and certify cooperative societies within the respective regional states. In relation to REDD+, the agency and its respective Woreda offices assist in providing technical supports including awareness creation during cooperative societies' establishment. The office prepares cooperatives' guidelines, issues certificates and approves bylaws. Now, most of the forest user groups organized under PFM are organized on the form of cooperative societies.

11.3.7. Woreda/District Level Government Organizations

Woreda administration is the top political government structure at district level. All the government offices are serving the people of the Woredas are under the political leadership of the Woreda administration. Woreda has given decision making power on local affairs closer to the people with a view to enhance democratic participation, capacity to make development plan and administer finances.

Every Woreda (district) is further divided in to Kebeles/villages which is the lowest government structure at Woreda (district) level. The Kebele administration and development agent at Kebele level are the main government bodies to directly communicate with the community at grassroots level.

Within the Woreda administration, the agriculture office's natural resource management team is responsible in supporting natural resource management and development activities including forest resources. Within the same office, rural land administration team is responsible to administer and issue legal certificate including cooperative land use right certificate.

Women, children and youth affair office is mandated to address gender issues. The office support women in the Woreda to participate and contribute in any development activities. With regard to the REDD+ process, the office play its role in addressing and coordinating women associations.

The Woreda cooperative promotion office is an important government body in organizing cooperatives in the Woreda. The office provide trainings to cooperative members on issues related to organizing cooperatives, administration issues, privileges and diversifying income generating mechanisms and enhancing profit through value chain development. Furthermore, the office prepares cooperative guidelines, forest cooperative establishment, issue legal cooperative certificate and approve bylaws.

11.3.8. Local Level Indigenous Institutions (LLII)

Local level indigenous institutions are important for the implementation of REDD+ milestones. Already existing local institutions if capacitated will support the wise use and management of the forest resources. Local traditional institutions such as *Aba Gada*, *Sinqe-Ayoo* (Oromia), *Gepitato* (Sheko people practice), *Edir* and *Debo* are known for their role in coordinating and resolving conflicts among community members. They are important in settling conflict. Harmonizing of local institutes with modern forestry management approach will make the REDD+ project successful.

These local institutions will ensure the sustainability of the ecosystem moving the forest resource into a multiple-asset approach, which recognize the wide variety of values of the ecosystem and diversifies revenue streams and capitalizing ecosystem values. Thus, these institutions play significant role in realizing the REDD+ at grassroots levels.

Similarly, religious institutions like churches and mosques can involve in forest protection through awareness creation in preaching. These institutions have better acceptance by the community in settling of conflict.

There are also some indigenous institutions specifically working on forest management. WAJIB and WABUB in Oromia Regional State of Bale Zone (Dodola Woreda) and Jima Zone (Gera Woreda) respectively.

11.3.9. WAJIB

WAJIB (Waldaa Jiraatota Bosonaa) is an acronym in Oromo language for forest dwellers association. WAJIB assist to make certain that local people can share the responsibilities and the benefits of forest conservation and can take decisions about forestry issues that affect their lives. The major purpose is to ensure that forest management makes a real contribution to make safe local livelihoods thereby securing also the future of the forest resources.

WAJIB recognizes that the forest dwellers are no longer marginal, instead, accepts that they are partners with a right to have a say in the management of the local forests and who expect professional services and assistance from the foresters. The process leads to collaboration and a relationship of equals. Most importantly, it demonstrates that if people can get secure access to the forests that have long been “protected” by the state alone, there is a huge potential for forests to play a substantial role in contributing to food security and transforming people’s lives.

11.3.10. WaBuB

WaBuB is an acronym for “Waldaa Bulchiinsa Bosonaa” in Oromoo language, meaning “Forest Management Association.” The name was originally given by a community which established the first WaBuB. WaBuB is also used as an area administrative unit which overlaps the administrative boundary of village or sub-village or a group of sub-villages. A WaBuB becomes effective once a Forest Management Agreement (FMA) is signed by the chairperson of the WaBuB Executive committee and the Jimma Forest Enterprise. The members of the WaBuB are thereby granted an exclusive right to use forest products within the demarcated forest area defined in the FMA.

The first phase of the Belete-Gera Participatory Forest Management Project (PFMP) established two WaBuBs in “Chaffee” and “Afalo” sub-villages in the Belete and Gera RFPAs. The second phase of the Belete-Gera PFMP aims to expand WaBuBs to other sub-villages within the Belete-Gera Regional Forest Priority Area (RFPA).

11.4. Institutional Review of other REDD+ Stakeholders

11.4.2. Ministry of Water, Irrigation and Electricity

The Ministry of Water, Irrigation and Electricity of Ethiopia is a Ministry that is engaged in the management of Water and Energy resources of Ethiopia. The Ministry undertakes development, planning and management of water and energy resources. It is mandated to set policies, strategies and programs, develop and implement water and energy sector laws and regulations, conduct study and research activities, provide technical support to regional water and energy bureaus and offices and make international agreements. With regard to the energy sector, among others the Ministry is mandated to undertake studies concerning the development and utilization of energy; and promote the growth and expansion of the country’s supply of electric energy and promote the development of alternative energy sources and technologies. Hence, the Ministry is one of the stakeholders in the implementation of the REDD+ process in Ethiopia. Besides electrifying parts of the country, the Ethiopian Rural Energy Development and Promotion Center, established by Proclamation No. 269/2002, plays significant role in reduction of the biomass used for energy purpose in the country through promotion of improved technologies. This goes with the major objective of the center, which is making conditions conducive for the development and promotion of rural energy resources and technologies. As one of the functions of the center is working on the efficient energy sources and technologies with due regard to the protection the environment. This function of the center makes its contribution to the REDD+ conspicuous. Rural energy efficiency is hoped to give additional impetus to the REDD+ system.

11.4.3. Ministry of Transport

The Ethiopian Roads Authority is an authority under the Ministry of Transport that is responsible for roads construction in the country. It is established in 1967 and since then has constructed 46812 km of roads throughout the country (ERA 2009). This figure does not include roads that join townships constructed by other bodies in rural parts of the country. In the coming five years, the Road and Transport Authority has planned to construct additional roads. Though there is no clear evidence on the size of areas deforested so far to construct roads, it is believed that significant amount of the forests have been cleared. Due to lack of knowledge on significance and value of forests the road construction activities was focusing on development of the road only. However, very recently the authority has started undertaking environmental impact assessment before construction of roads and implementing projects which are climate resilient. In relation to REDD+, the Authority can plan together with MEF and the secretariat in order avoid unnecessary deforestation to appropriately implement the REDD+. The Road Authorities at regional level are responsible for constructing all weather road and road networks within Woredas. Hence their engagement is crucial for proper implementation of the REDD+ in the country.

11.4.4. The Ministry of Federal and Pastoralist Affairs

One of the purposes for the establishment of the Ministry of Federal and Pastoralist Affairs is to provide assistance to the regional states particularly to those deserving special support. It also coordinates, integrates and follows up supports given by other federal organs to regional states deserving special support. The Ministry handles religious affairs in order to maintain sustainable peace and security by ensuring tolerance and understanding among different religions targeting the overall development of the country.

It is playing a pivotal role in bringing equitable development in the emerging regions, to prevent and resolve conflicts, by strengthening the federal system, to uphold Federal – Regional relations in the country, and to maintain good relations, peace and tolerance among different religions and beliefs. During REDD+ implementation the ministry will have significant role in resolving potential conflicts between regions. Moreover, its coordination role can be a good source of lesson for coordinating REDD+ implementation.

11.4.5. Higher Educational Institutions

Higher Educational Institutions are now involving in the REDD+ technical working group and they are members of the different task force. These institutions are helping the Secretariat in producing trained manpower who will be engaged in REDD+ implementation. Particularly the manpower will involve the wider implementation of the safeguard instrument of REDD and other safeguard tool. In addition to that the institutions will involve in REDD+ research. Moreover, two academic institutions Haramaya University and Hawassa University College of Forestry and Natural resource are working to integrate REDD+ in their under Graduate and Post Graduate course syllabus respectively. The integration of REDD+ in the course syllabus at higher learning institution will fill the capacity gap of implementing REDD+ at full scale.

11.4.6. HoAREC&N

The Horn of Africa Regional Environment Centre and Network (HoA-REC&N) is an autonomous institution under Addis Ababa University. It was established in 2006 and has grown into a network of 42 member organizations. The organization focuses on environmental concerns and on options for sustainable development within the Horn of Africa region. It works with over 40 local member organizations, CSOs, and research institutions to facilitate learning and knowledge exchange, in order to enhance environmental governance and management, contribute to sustainable development, and improve livelihoods within the region. It is recruited as a member of REDD+ technical committee and contributed to the development of the R-PP and other technical issues. It is engaged in building carbon credit project directly working on the ground with REDD+ projects.

11.4.7. FARM Africa

FARM Africa is an international NGO that started working in Ethiopia since 1988. It is engaged in supporting agrarian communities. The UK based organization assists farmers, pastoralists and forest dwellers by providing material as well as training on how to sustainably manage their resources. The idea of participatory forest management (PFM) also was initiated and implemented in Ethiopia by FARM Africa and SOS Sahel. One focus area of Farm Africa adaptation and climate change impacts.

Together with SOS Sahel, the organization has done great jobs directly related to PFM. The Bale Eco-Region Sustainable Management Program (BERSMP) and the Bale Mountains REDD+ Project and the 'Strengthening Sustainable Livelihoods Forest Management Program (SSLFMP) are worth mentioning. Hence, the organization is actively participating in the implementation process of the national Climate Resilient Green Economy (CRGE) initiative and the REDD+ program. It is a member of the REDD+ Steering Committee.

11.4.8. SOS Sahel

SOS Sahel is an international NGO working with smallholder farmers and pastoralist people of rural communities and government. It is engaged in activities that enable poverty alleviations through Sustainable Natural Resources Management and Value Chain Development.

The organization together with Farm Africa has taken the initiation of PFM and played significant role in protection of the forest resources of Ethiopia. To this effect, the organization together with Farm-Africa has implemented projects that enabled harmonization of forest dwellers with the biodiversity and ecology in Bale zone of the Oromia region by introducing sustainable utilization and management of natural resources. The organization works on climate change impacts adaptation and mitigation. SOS Sahel Ethiopia is a member of the REDD+ technical committee.

11.4.9. World Vision

World Vision Ethiopia started working in Ethiopia since 1975 and contributed to the well-being of vulnerable children in partnership with the church, civil society and the government on area of education, food security, health, HIV, water, sanitation, and hygiene, and environment and climate change.

With regard to supporting community livelihood and degraded habitat rehabilitation through carbon revenue schemes World Vision Ethiopia (WVE), in collaboration with World Vision Australia (WVA) has achieved valuable result with the Sodo and Humbo communities. World vision has

supported environmental training and education programs, site rehabilitation, forest establishment, job creation for local community members and collaboration with the zonal government during project implementation. The rehabilitation of degraded habitat providing much needed adaptive and environmental resilience for communities exposed to flooding, drought and food security risk.

World vision has facilitated the establishment of cooperatives and land ownership right The Ethiopian Government has endorsed that ownership of carbon rights, and therefore revenues derived from carbon offsets, are owned by the community. The organization is working to scale up benefiting communities in other parts of the country through carbon revenue generating mechanisms. Hence the experience of the organization can support the REDD+ process in Ethiopia.

11.4.10. Donor Institutions

11.4.10.1. The Government of Norway

The Norwegian government is supporting global attempts to reduce climate change impacts that occur by ensuring deep cuts in global greenhouse gas emissions in developing countries. To this effect, at COP-13 in Bali, the Norwegian Government pledged to provide up to US\$600 million annually towards REDD efforts in developing countries.

To enable the deep cut of global greenhouse gas emission the government of Norway has become one of the main bilateral donors of the national REDD+ programme and related efforts. Till now Norway's International Climate and Forest Initiative (NICFI) is financing the implementation of the R-PP (USD 5 million) and the development of the Monitoring, Reporting and Verification (MRV) Roadmap (USD 2 million).

It is also funded the Bale Eco-Region Sustainable Management Programme (BERSLMP) together with the Government of Ireland and the Government of the Netherlands, which will build the foundation for the Bale Eco-region REDD+ project). The government will also provide additional 50 million USD in multi annual support bases for the implementation of the Oromia REDD+ pilot. Hence, the Government of Norway is playing and continues to play significant role in implementation of the REDD+ processes in Ethiopia.

11.4.10.2. DFID-Ethiopia

The Department for International Development (DFID) is a UK government sector established to help countries to come out of poverty through its international investment scheme in poor countries. The money allocated by UK government to spend on international development until March 2016. DFID helps to build strong and investable business environments in developing countries and improving access to finance for entrepreneur especially giving priority for girls and women in developing countries.

DFID helps more to countries that are at higher risk of natural disasters to become more resilient. DFID has encouraged and continues to encourage development actors to work together and use internationally agreed principles for aid and development effectiveness. DIFD works to can end aid dependency for good and build a better, more prosperous world.

DIFD works on building capacity of the Government of Ethiopia, the private sector and civil society to adapt to future climate change and benefit from opportunities for low carbon growth. Hence, started to support climate change adaptation attempts since 2011/2012 with the government and played great role in supporting REDD+ R-PP process.

11.5. REDD+ Management Arrangement

11.5.2. Federal REDD+ Management Arrangement

The implementation of REDD+ program requires a coordinated effort. The Federal level REDD+ Management arrangement (as described in section 2.7) is established and it is fully operational. 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 ToR. The REDD+ management arrangement is gradually moving to embrace the regional state level REDD+ unit led by regional coordinators. Regional steering committee and regional technical working group have been functional in Oromia region, with representatives from the forest-dependent peoples and civil society organizations. In other regional States similar arrangements are being followed. REDD+ Coordination Units at region level are playing the role of the REDD+ Secretariat at Regional Level, and now the units are in place in three more (SNNPR, Tigray and Amhara) regional states.

11.5.3. The Federal Level REDD+ Steering Committee (RSC)

The federal REDD+ Steering committee constitutes different relevant federal and regional high level decision makers. The State Minister for the Forest Sector chairs the National REDD+ Steering committee, a decision making body providing oversight for REDD+ Readiness. Members of the REDD+ Steering Committee are drawn from key REDD+ government institutions such as MEF, Ministry of Agriculture, Ministry of Water, Irrigation and Energy, Ministry of Children, Women and Youth, Deputy Director Generals of Regional Forest Enterprises, Representatives of Forest Cooperatives and Academic Institutions, and the Media. The major function of the Steering Committee is to give guidance and advice for the secretariat. The steering committee will meet biannually and approve the annual plan and evaluate the progress.

11.5.4. National REDD+ Technical Working Group

The secretariat works with support by the Federal Level REDD+ Technical Working Group (RTWG). The primary mandate of the National REDD+ Technical Working Group is to advise the REDD+ implementation agencies and to help build capacity among the entities involved in REDD+ issues. The REDD Technical Working Group is composed of professionals engaged in the REDD+ field, working research and academic institutes, government, NGOs and other development organizations. These technical experts provide technical support in the implementation of the REDD+ process. The REDD Technical Working Group also important in coordinating other sectors to implement activities related to REDD+.

These technical experts are responsible for the management of the REDD+ strategy development. The RTWG also plays a key role in ensuring efficient and close coordination between the activities related to REDD+ and the other sectors, especially related to the activities under the “Climate Resilient Green Economy” initiative.

The RTWG draws members from government institutions, civil societies and donors. Three task forces focused on REDD+ Strategy, MRV system and Safeguards regularly meet and actively engage in providing technical support to REDD+ readiness.

11.6. REDD+ Task Force

Three Federal level task forces were established by drawing from Federal Technical Working

group. The task forces are Federal Strategy task force, Federal MRV task force and federal level SESA/ESMF and Consultation and Participation task force. These three task forces are working closely for successful accomplishments of the three REDD readiness milestones.

11.6.2. The SESA and Consultation and Participation Task Force (SESACP)

The establishment of a SESACP Task force is aimed at ensuring that the SESA and C&P process gets a clear oversight. 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.

11.6.3. The MRV Task Force

Ethiopia's vision on MRV is to develop a multi-scale and multifunction forest monitoring system that takes full advantage of the existing national forest inventory along with regional or local inventories to monitor carbon stocks with low uncertainty. The MRV team propose and put in place a system and road map for monitoring changes in forest cover or forest degradation. The MRV team will assign the number of sample in each forests to determine the carbon stock and the resources as well. The team will be expected to play key role in the effective implementation of the MRV road map and Reporting and Verification aspects of the MRV system.

11.6.4. National REDD+ Secretariat

The REDD+ Secretariat is mandated to facilitate the REDD+ activities in order to execute the REDD+ processes in the country. The REDD+ Secretariat was situated at the Federal Environmental Protection Authority (FEPA) during the R-PP development phase (2009-2011). It was moved to the Natural Resources Management Directorate of the Ministry of Agriculture (MoA) in accordance with the agreement between the Government of Ethiopia and Development Partners at the November 2011 mission for the R-PP assessment. The State Minister of Natural Resource Sector to oversee the development of REDD+ Readiness Process and since July 2013 housed at the new Ministry of Environment and Forestry.

11.6.5. Focal Persons

Focal persons have been nominated by the regions to facilitate the REDD+ activities in their respective regions where REDD coordination unit is absent. Focal persons were hired to coordinate the REDD+ readiness processes. These focal persons are working as liaising the region with the secretariat and also working by facilitating the REDD+ capacity building activities.

11.6.6. Regional REDD+ Management Arrangement

In order to implement the REDD+ readiness program at regional level in addition to focal persons, regional REDD+ coordination units was established in Oromia region.

The Coordination Unit is now fully staffed and operational with responsibilities of coordinating the design and implementation of the Oromia Forest Landscape Program and of supporting the regional capacity building activities. Besides, three other REDD+ Coordination Units are being established in Amhara, Tigray and South Nations, Nationalities and Peoples regional states for planning and implementation of regional REDD+ pilots and regional capacity building activities.

11.6.7. Coordination among Ministries

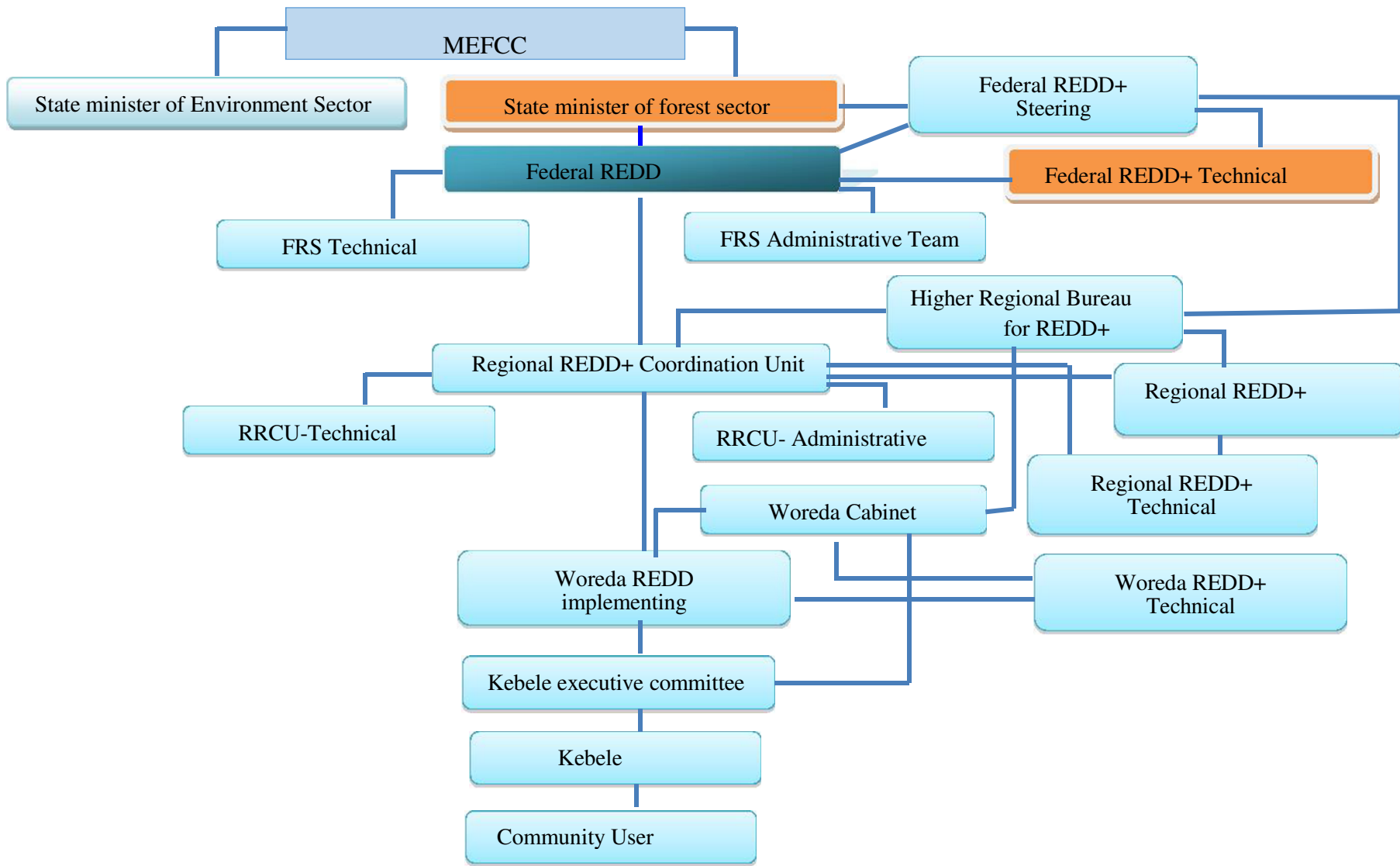
The Ministry of Environment and Forest is assigned to manipulate the REDD+ process which is considered as valuable tool for a resilient economic growth of the country. On the other hand the Ministry of Finance and Economic Cooperation (MoFEC) is an institution that is deployed to facilitate the CRGE. The Ministry manages the finances for Climate Resilient Green Economy (CRGE) initiatives, which will involve channeling funds towards REDD+ and manages the selling of expected project generated carbon credits. Thus, the two ministries need to have strong coordination for the successful accomplishment of the REDD+ process.

The agriculture sector, which is the major driver of deforestation in Ethiopia, is a prominent actor in the national REDD+ activities implementation. Forest dependent communities need to be properly addressed and supported by the major sectors particularly agriculture, energy and forestry. Nonetheless, apart from the inter-ministerial CRGE steering committee that looks into the cross-sectoral mitigation efforts and evaluates the progress, there seem to be limited forum for bringing important actors on board for coordinated effort.

A strong coordination among MoANR, MEFCC, Ministry of Water, Irrigation and Electricity is crucial for the realization of REDD+ in the country. Planning and implementation of REDD+ strategies need bringing governmental, nongovernmental, community based organization, religious and traditional institutions together.

For smooth implementation of REDD+ activities, there should be a fertile ground for establishment of institutional partnership among the responsible ministries with MEFCC. There should also be a strong coordination with stakeholders at the federal, regional and local levels including intergovernmental coordination among different regions or zones as well.

11.7. A Template for Organizational structure of REDD+ pilot projects²²



²² Institutional arrangements may change under GTP-II and will this template.

12. Analyses of the Potential Impacts, Risks and the Mitigation

12.2. Measures for the Proposed REDD+ Strategic Options

The potential positive impacts and risks of the strategic options presented in the following sub-sections are extracted from the views of the key experts, consultation carried out at different levels (from national to Kebele), focus group discussion, household interview and keen observations of the key staffs during the field assessment. The issues are identified, assorted into relevant strategic options and then analyzed.

12.3. Review of the Proposed REDD+ Strategic Options to Address the Drivers of Deforestation and Forest Degradation

12.3.2. Drivers of Deforestation and Forest Degradation (D-DD)

Forests are vulnerable to decrease in spatial coverage, selective felling, and replacement by alien species and decrease in biodiversity due to several interplaying factors or drivers, thus contributing to release of CO₂ into the atmosphere. These activities or drivers of deforestation and forest degradation are classified as either direct (proximate) or indirect as described in section 2.4. After extensive review of the available literature, the most common direct and indirect drivers of deforestation and forest degradation in Ethiopia are synthesized and discussed in this SESA to effectively address them in the strategic options scenarios. Proper analysis and understanding of the drivers is crucial for designing interventions specifically to target the drivers, thereby increasing the likelihood of reducing emissions through REDD+.

12.3.2.1. Direct Drivers of Deforestation and Forest Degradation

As discussed in section 2.4 earlier, direct drivers are human activities that directly alter or impact on forest cover leading to forest decline and loss of carbon. Unlike the indirect drivers, the direct drivers of deforestation and forest degradation can be quantified by spatial analysis. For strategic interventions, the prevalent direct drivers of deforestation and forest degradation affecting the different forest ecosystems in the country are described in Table 16 below and each of them is discussed subsequently.

Table 16: Description of the anthropogenic and natural direct drivers of deforestation and forest degradation in Ethiopia.

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Factors	Types of Drivers	Impacts	Affected forest ecosystems
Anthropogenic	Small-scale agriculture	Deforestation	High forests and woodlands
	Large-scale agriculture	Deforestation	Woodlands and high forests
	Fuel wood extraction	Degradation	Woodlands and high forests
	Charcoal production	Degradation	Woodlands
	Logging (legal and illegal) and Construction wood extraction	Degradation	High forests
	Forest coffee planting	Degradation	High forests
	Livestock grazing	Degradation	High forest, woodlands
	Mining (small and large scale)	Deforestation	Woodlands
		Degradation	High forests
	Roads and infrastructure	Deforestation	High forests
		Degradation	Woodlands
Invasive alien species	Degradation	High forests and woodlands	
Fires	Degradation	Woodlands, high forests, bush lands	
Natural	Wild Fire	Degradation	Woodlands, high forests, bush lands
	Climate change/Drought	Degradation	Woodlands
	Pests and diseases	Degradation	High forests, plantations
	Floods	Degradation	Woodlands

Table 23-Description of drivers of deforestation and forest degradation

Drivers	Description
Small-scale agriculture:	Small-scale agriculture is vital for livelihoods in Ethiopia and it accounts for significant proportion of the rural employment and food production. Deforestation is driven by permanent and shifting cultivation by smallholder farmers in high forest and woodland area of the country.
Large-scale permanent agriculture:	Large-scale permanent agriculture is promoted and expanded as part of the agricultural growth program of the country to increase food production and export earnings. Foreign direct investment and local investors are main players in large-scale permanent agriculture. Although land for such investments are studied and identified, the actions in some areas aggravate deforestation in the high forests and woodland resources.
Fuel wood extraction and charcoal production:	Ethiopia is highly dependent on biomass energy that includes fuel wood, charcoal, agricultural residues, animal dung that account more than 90% of the total domestic energy demand. Although electricity production dramatically increased, significant proportions of urban households use charcoal for cooking. The high biomass energy consumption, along with inefficient utilization, has aggravated deforestation, biodiversity loss and land degradation.

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Logging (legal and illegal) for timber and lumber production:	State forest enterprises carry out logging in some natural forests in the country. Private small and large wood-based industries carry out timber extraction. Squatters and trace-passers also carry out illegal logging in high forests. Such practices are not guided and regulated because of weak law enforcement, and thus result in forest ecosystem degradation in the country.
Forest coffee plantations:	Forest plantations take place in large and small scale both legally and illegally in the high forest areas. This is done at commercial and subsistence level. Coffee trees are planted after removing the forest undergrowth in the lower strata (only leaving the high canopy shades) and cause significant loss of biodiversity and disrupt the ecosystem functions, services and reduce the forest productivity.
Livestock grazing:	Increasing number of livestock population and continued shrinking of grazing lands promoted increased use of forestlands (high forest and woodlands) as grazing areas. Access to forests is not regulated and they are open for free grazing. This is hampering the regeneration potential, the biodiversity of the forest and exposing the surface for soil degradation.
Mining (small and large scale)	The country has huge deposits of mineral resources. In most cases, these deposits are buried under dense vegetation of high forests and woodlands. For instance, Gold mining, coal mining, other industrial minerals (potash, tantalum, etc.) mining are currently important drivers of deforestation in the high forest and woodland forest ecosystems.
Infrastructure:	The country has embarked on ambitious growth program and the road network expansion, rail network expansion, power infrastructure and industrialization are some of the important planned drivers of deforestation in high forest and woodland ecosystems. Although EIA is being done for such mega-scale projects, conversion of forestland often is unavoidable (e.g., in the case of hydro-dams).
Fire (wild and human caused):	Deliberate fire is used as a management tool in rangeland ecosystems. Wild and deliberate fires commonly rage in woodlands and high forest areas. In all cases, fire causes degradation by affecting the diversity and composition of species, structure and primary productivity of the forests.
Droughts:	Droughts are common phenomena in the lowland woodland areas. Droughts affect vegetation diversity, composition and structure. Extreme dry climate causes fires, exposes the soil for erosion and culminates in ecosystem degradation.
Pests and diseases:	The experience in Ethiopia shows there have been very few incidences of forests being massively affected by pests and diseases. However, there are historical evidences that disease attacks happened in isolated cases in high forest areas and in plantation forests (e.g., in Cupressus and Eucalyptus stands).

12.3.2.2. Underlying causes of Deforestation and Forest Degradation

The underlying or indirect causes of deforestation and forest degradation are complex interactions of fundamental social, economic, political, cultural and technological processes that

SESA report for the implementation of REDD+ in Ethiopia influence the direct drivers and the human activities- often distant from their area of impact. The indirect drivers can operate at local, national or global levels and are often difficult to assess and quantify. Drawn from the review work in section 2.4 and from consultations with stakeholders, the underlying causes are categorized under the root factors as shown in Table 18. Each of the underlying cause is discussed below.

Table 24: Table 18: Description of the root factors and underlying causes of deforestation and forest degradation in Ethiopian

<i>Root Factors</i>	<i>Underlying causes</i>	<i>Scale of operation</i>
Economic	Commodity markets	International
	Investment	National
	Urbanization	National/Local
	Unemployment	National/Local
Social	Poverty	Local
	Livelihoods	Local
	Conflicts	National/ Local
	Gender	National/Local
	Awareness/education	National/Local
Political	Equity	National
	Resource allocation	National
Demographic	Population	National
	Migration	National/Local
	Resettlement	National
Cultural	Attitudes	Local
	Values and beliefs	Local
Governance and Institutional	Policy (land and forest)	National
	Institutional structure	National/Local
	Law enforcement	National/Local
	Benefit sharing	National/Local
	Tenure and use rights	National/Local
	Corruption	National/Local
	Sectoral synergy	National
	Capacity	National/Local

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Table 25-Description of underlying causes of deforestation and forest degradation

Underlying causes	Description in the Ethiopian context
Economic causes	
Commodity market	Commodity prices for major cash crops such as coffee, khat and oil seeds affect local production systems often leading to policy adjustments at the national level and triggering land use changes at the local level, encouraging deforestation and forest degradation
Investment	Favorable policies for agricultural and industrial investments are attracting foreign direct investments and boosting domestic investments increasing the demand for large tracts of land. This triggers clearing of forests in high forest and woodland areas
Urbanization	Economic development in urban centers and industrial expansion in the peripheral areas of urban centers push urban limits to forest landscapes and initiate deforestation
Unemployment	Extreme fragmentation of land in rural areas is causing increasing rate of unemployment. The rural unemployed youth in forest resource areas will either migrate to urban centers or resort to forest resource extraction for living or conduct deforestation to claim land.
Social causes	
Poverty	Because of the weak state of law enforcement, access to the forest resources is open and the rural poor rely on selling of forest products for living. The poor are the landless, the unemployed, the underserved and the resource poor community members.
Livelihoods	Charcoal, fuel wood, timber and non-timber forest products are main sources of livelihoods for certain community groups in the forest areas. Forest dwellers and those who live at the forest margins heavily depend on the forest resources continue to exploit the resources, resulting in degradation and deforestation.
Conflicts	Conflicts (internal and external) cause displacement of people and results in deforestation and forest degradation. This is very common in the border areas with countries that have internal conflicts.
Gender	Gender disparity and resource entitlements (land, capital, and material) inequality result in increased deforestation. Women in rural Ethiopia are disadvantaged and resources ownership is entirely in the male domain. Thus, women tend to rely on free access resources such as forests for their income.
Awareness/education	There is awareness gap in the understanding of the inter-generational benefits of forest resources, and their role in sustaining food production in agricultural landscapes. This is largely due to the lack of education.
Political causes	
Equity	Faire distribution of national resources is often lacking (either due to misguided policies, or for lack of impartiality or for lack of the proper political instruments), and thus significant segments of the population will be left out and remain poor.
Resource allocation	Resources are allocated for sectors that are deemed essential to drive the economic development. The forestry sector is sidelined since long in allocating the necessary resources and thus, the development of forestry and the potential contribution to the national GDP is undermined.
Demographic	

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Underlying causes	Description in the Ethiopian context
Population growth	The Ethiopian population is growing at a faster rate, which is more than 2.9 % per annum. This exerts pressure on the forest resource to claim more land to produce the required food. In the rural areas, population growth is driving deforestation (especially in the vast forest resource areas)
Migration	Both internal and external factors are contributing to migration of people to the forest regions. In the border areas, the woodlands are suffering extreme deforestation from migrants of neighboring countries. The south and southwest forests are under pressure from internal influx of people.
Resettlement	Resettlement is still a national policy option to address food insecurity and environmental degradation. Areas where resettlements took place, deforestation is rampant due absence of proper guideline on land and forest resource use.
Cultural	
Attitude	In some areas, people have negative attitude towards trees and forests as being source of pests and harboring harmful animals (that attack crops). Thus, clearing the forest is seen as preventing those pests and harmful animals.
Governance and institutions	
Policy (land and forest)	At the national level, the land use policy and forest policy are not fully implemented. Lands that are not suitable for cultivation are still being used for crop production. There is no national land use plan, which is critical for defining and allocating land according to its capability and suitability. This has hampered forest development. The forest policy lacks implementation guidelines. The proclamations decree private forest ownership but in practice, the private sector is not involved in the forest development. Investment policy encourages forestry development but due the risk and longer rate of return, investment in forestry is
Institutional structure	The forest sector governance has gone through frequent structuring and restructuring causing poor institutional memory. Though the new ministry is formed, its structure is limited at the top level. Forestry in the regional structures is treated differently. In some cases, the representation is at expert level while some have formed enterprises to harness conservation and utilization. Such structural adjustments have also created mandate overlaps and gaps, leaving the resources exposed to further destruction.
Law enforcement	Due to lack of implementation guidelines, absence of experience in handling criminal offenses in the sector, and sometimes due to corruption, forest law enforcement is weak. Trace-passers/offenders are not penalized as per the law. This causes precedence for increased deforestation.
Benefit sharing	Local communities are natural guardians of forest resources since they have multiple attachments to the resources. Whatever forms of forest conservation or management projects are planned, it should consider possible forms of benefit sharing mechanism for local communities. There are good experiences from PFM and JFM initiatives but still there are no

SESA report for the implementation of REDD+ in Ethiopia

Underlying causes	Description in the Ethiopian context
	proven models for benefit sharing. Lack of such mechanism is contributing to deforestation and degradation.
Tenure and Use rights	Forest and forestland ownership is defined as state and private in the federal forest proclamation. Community ownership is considered as private ownership. Some regions recognize community or collective ownership separately as a third type of ownership. However, use rights are not properly defined and “owners” or users are not able to protect their user rights. There are no mechanisms to prevent non-owners. The notion that forests being “open access resources” still reigns. Clear definition of use rights with implementation/right protection instruments is necessary, especially for forest-dependent community groups so as to protect the forests.
Corruption	Corruption in the sector is contributing to deforestation and forest degradation by issuing forestland for coffee plantations and agricultural investments. Illegal logging and free movement of timber products from illegal sources is carried out through corruption.
Sectoral synergy	Cross-sectoral synergy in policy, joint planning and implementation is rare. Lack of coordination among the relevant institutions (investment, agriculture, environment, energy, forestry) is contributing to increased deforestation.
Capacity	Financial capacity is limited both for increased development and improving protection and conservation. There is annually meagre allocation of resources for seedling planting at small scale. However, the sector needs large-scale intervention both in plantation and protection of the same. At the local level, human and material resources are needed in the required quantity.

12.4. Proposed Strategic options to address the drivers of deforestation and forest degradation and Legal

12.4.2. Institutional framework

The **draft national REDD+ Strategy** identified comprehensive range of strategic options for this SESA, which could be broadly grouped into three major categories, namely policy and institutional measures, targeted sector-based measures and crosscutting issues. These strategic options are inclusive of the different options identified in the national strategic documents such as the CRGE and the R-PP document as well as the regional pilots. However, while the options identified in the R-PP were proposed within the existing legal, policy and institutional frameworks, the proposed national strategy options in the draft REDD+ strategy require changes and adjustments in the current legal and regulatory frameworks. In this SESA, the proposed strategic options and the identified activities under each strategic option in the Table 20 below are applied to scrutinize how each of the direct and indirect drivers are addressed in those strategies and what social and environmental risks and impacts will emanate from the implantation of these strategic options.

Table 26-The proposed strategic options and the identified activities under each strategic option

<i>Strategic options and main levers in the draft national REDD+ strategy</i>		
Strategic Option categories	Main levers of the Strategic Options (SO)	Activities of the strategic options
Policy and institutional measures	<ul style="list-style-type: none"> SO1: Enhancing cross-sectoral synergies and stakeholder participation 	<ul style="list-style-type: none"> SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors) SO1b: Put in place inter-regional coordination institutional arrangements SO1c: Put in place joint planning among core sectors (agriculture, energy and forestry)
	<ul style="list-style-type: none"> SO2: Ensuring effective forest governance and law enforcement 	<ul style="list-style-type: none"> SO2a: Protecting natural forest SO2b: Adequate financing of forestry institution SO2c: Strengthening of regional and local level governance structures SO2d: Develop skilled manpower SO2e: Capacity building of legal practitioners at all levels
<i>Strategic options and main levers in the draft national REDD+ strategy</i>		
Strategic Option categories	Main levers of the Strategic Options (SO)	Activities of the strategic options
	<ul style="list-style-type: none"> SO3: Ensuring clear forest tenure and property rights 	<ul style="list-style-type: none"> SO3a: Establish stable and equitable forest property right structures SO3b: Make legal and institutional reforms that warranty the forest ownership and use rights SO3c: Formulation of fair carbon rights for stakeholders

	<ul style="list-style-type: none"> • SO4: Promoting Land Use Planning 	<ul style="list-style-type: none"> • SO4a: Develop national level land use planning framework guideline • SO4b: Formulate broader regional land use plan
Targeted sector based measures (Focusing on forest, agriculture and energy sectors)	<p>SO5: Ensuring Sustainable Forest Management (in high forest as well as woodlands)</p>	<ul style="list-style-type: none"> • SO5a: PFM and traditional/ customary forest management practices • SO5b: Optimizing outputs without compromising the biodiversity of the forest in coffee growing areas • SO5c: Prevent forest fire with the participation of relevant stakeholders and communities
	<ul style="list-style-type: none"> • Enhancement of Forest Carbon Stock (SO6) 	<ul style="list-style-type: none"> • SO6a: Agroforestry • SO6b: Area closure on degraded lands • SO6c: Afforestation/reforestation • SO6d: Integrate physical and biological conservation measures with afforestation and reforestation • SO6e: Integrated carbon enhancement activities in existing watershed areas
	<ul style="list-style-type: none"> • SO7: Agricultural intensification 	<ul style="list-style-type: none"> • SO7a: Agricultural intensification • SO7b: Adopt climate smart agriculture • SO7c: Assist natural regeneration (ANR) of degraded areas • SO7d: Implement irrigation
	<ul style="list-style-type: none"> • SO8: Reducing Demand for fuel wood and charcoal through increased efficiency and providing alternatives 	<ul style="list-style-type: none"> • SO8a: Dissemination and usage of fuel efficient stoves in urban centers and forest areas/villages • SO8b: Use of feasible alternative energy sources (LPG, biogas, biofuel) in off-grid areas

Strategic options and main levers in the draft national REDD+ strategy

Strategic Option categories	Main levers of the Strategic Options (SO)	Activities of the strategic options
		<ul style="list-style-type: none"> • SO8c: Adopt energy saving techniques for public institutions (prisons, army barracks, universities, hospitals)
	<ul style="list-style-type: none"> • SO9: Increasing supply of wood and charcoal through increased afforestation and reforestation 	<ul style="list-style-type: none"> • SO9a: Commercial tree planting • SO9b: Encourage on-farm tree planting • SO9c: Produce charcoal from both sustainably managed natural forests and plantations • SO9d: Promote modern charcoal production technologies • SO9e: Promote charcoal as an export commodity
	<ul style="list-style-type: none"> • SO10: Improving Livestock Management 	<ul style="list-style-type: none"> • SO10a: Increase animal value-chain efficiency • SO10b: Improve cattle productivity (i.e., output per head of cattle via higher production per animal and an increased off-take rate) • SO10c: Improve the health of livestock • SO10d: Substitute meat protein consumption with protein from poultry to significantly reduce emissions from domestic animals • SO10e: Replace about 50% of animal draft power by mechanical equipment for ploughing/tillage
	<ul style="list-style-type: none"> • SO11: Promoting supplementary income generation options 	<ul style="list-style-type: none"> • SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.) • SO11b: Promote forest-based enterprises based on wood products • SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest • SO11d: Increase the product value chains of forest

Strategic options and main levers in the draft national REDD+ strategy

Strategic Option categories	Main levers of the Strategic Options (SO)	Activities of the strategic options
Cross-cutting Issues	<ul style="list-style-type: none"> • SO12: Capacity Building 	<ul style="list-style-type: none"> • SO12a: Provide material support to those engaged in REDD+ process • SO12b: Provide technical trainings to those engaged in REDD+ process • SO12c: Provide local and international experience sharing to those engaged in REDD+ process
	<ul style="list-style-type: none"> • SO13: Inter-sectoral coordination on planning and implementation 	<ul style="list-style-type: none"> • SO13a: Create and ensure strong coordination among relevant stakeholders
	<ul style="list-style-type: none"> • SO14: Demand-driven research and extension linkage 	<ul style="list-style-type: none"> • SO14a: Evaluate models for private public partnership • SO14b: Valuation of forests and their contribution to national GDP • SO14c: Build in-country research capacity • SO14d: Ensure linkage between research and extension
	<ul style="list-style-type: none"> • SO15: Ensure full participation and equitable benefit sharing for women 	<ul style="list-style-type: none"> • SO15a: Main stream gender in REDD+ process to benefit • SO15b: Develop women-specific knowledge on natural resource management
	<ul style="list-style-type: none"> • SO16: Benefit Sharing 	<ul style="list-style-type: none"> • SO16a: Equitable distribution of the costs and benefits • SO16b: Solicit stakeholders to participate in REDD+ actions • SO16c: Share benefit to eligible ones accrued from REDD+ action • SO16d: Assists bylaw development of CBOs for benefit share among individual members

12.4.3. Strategic Options to address the direct drivers of Deforestation and Forest Degradation

The analyses Table 21 below shows that the direct drives are addressed under the different strategic options and relevant activity measures are identified.

Table 27-Analysis of the strategic options vis-à-vis the direct drivers of deforestation and forest degradation

Direct Drivers	Strategic options	Relevant activities under the strategicoptions
Small scale agriculture	SO7: Agricultural intensification	<ul style="list-style-type: none"> • SO7a: Agricultural intensification • SO7b: Adopt climate smart agriculture • SO7d: Implement irrigation
Large scale permanent agriculture	SO1: Enhancing cross-sectoral synergies and stakeholder participation SO4: Promoting Land Use Planning SO13: Inter-sectoral coordination on planning and implementation	<ul style="list-style-type: none"> • SO1a: Revisit existing policies and strategies of keysectors (agriculture, investment, energy and other relevant sectors) • SO1b: Put in place inter-regional coordination institutional arrangements • SO1c: Put in place joint planning among core sectors (agriculture, investment energy and forestry) • SO4a: Develop national level land use planning framework guideline • SO4b: Formulate broader regional land use plan • SO13a: Create and ensure strong coordination among relevant stakeholders
Fuel wood extraction and charcoal production	SO8: Reducing Demand for fuel wood and charcoal through increased efficiency and providing alternatives SO9: Increasing supply of wood and charcoal through increased afforestation and reforestation	<ul style="list-style-type: none"> • SO8a: Dissemination and usage of fuel efficient stoves in urban centers and forest areas/villages • SO8b: Use of feasible alternative energy sources (LPG, biogas, biofuel) in off-grid areas • SO8c: Adopt energy saving techniques for public institutions (prisons, army barracks, universities, hospitals) • SO9a: Commercial tree planting • SO9b: Encourage on-farm tree planting

Direct Drivers	Strategic options	Relevant activities under the strategic options
		<ul style="list-style-type: none"> • SO9c: Produce charcoal from both sustainably managed natural forests and plantations • SO9d: Promote modern charcoal production technologies • SO9e: Promote charcoal as an export commodity
	SO15: Ensure full participation and equitable benefit sharing for women	<ul style="list-style-type: none"> • SO15a: Main stream gender in REDD+ process to benefit • SO15b: Develop women-specific knowledge on natural resource management
Logging (illegal and legal) for timber and lumber production	SO2: Ensuring effective forest governance and law enforcement	<ul style="list-style-type: none"> • SO2a: Protecting natural forest • SO2b: Adequate financing of forestry institution • SO2c: Strengthening of regional and local level governance structures • SO2d: Develop skilled manpower • SO2e: Capacity building of legal practitioners at all levels
	SO11: Promoting supplementary income generation options	<ul style="list-style-type: none"> • SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.) • SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest • SO11d: Increase the forest product value chains
Forest coffee plantations	SO5: Ensuring Sustainable Forest Management (in high forest as well as woodlands)	<ul style="list-style-type: none"> • SO5a: PFM and traditional/ customary forest management practices • SO5b: Optimizing outputs without compromising the biodiversity of the forest in coffee growing areas
Livestock grazing	SO10: Improving Livestock Management	<ul style="list-style-type: none"> • SO10a: Increase animal value-chain efficiency • SO10b: Improve cattle productivity (i.e., output per head of cattle via higher production per animal and an increased off- take rate) • SO10c: Improve the health of livestock • SO10d: Substitute meat protein consumption with protein from poultry to significantly reduce emissions from domestic animals

Direct Drivers	Strategic options	Relevant activities under the strategic options
		<ul style="list-style-type: none"> • SO10e: Replace about 50% of animal draft power by mechanical equipment for ploughing/tillage
Mining	SO13: Inter-sectoral coordination on planning and implementation	SO13: Create and ensure strong coordination among relevant stakeholders
	SO6: Enhancement of Forest Carbon Stock	<ul style="list-style-type: none"> • SO6b: Area closure • SO6c: Afforestation/reforestation • SO6d: Integrate physical and biological conservation measures with afforestation and reforestation
Infrastructure	SO13: Inter-sectoral coordination on planning and implementation	<ul style="list-style-type: none"> • SO13a: Create and ensure strong coordination among relevant stakeholders
Fire (wild and human caused)	SO5: Ensuring Sustainable Forest Management (in high forest as well as woodlands)	<ul style="list-style-type: none"> • SO5c: Prevent forest fire with the participation of relevant stakeholders and communities
Droughts (climate change)	SO6: Enhancement of Forest Carbon Stock	<ul style="list-style-type: none"> • SO6b: Area closure on degraded lands • SO6c: Afforestation/reforestation • SO6e: Integrated carbon enhancement activities in existing watershed areas
Pests and diseases	SO12: Capacity Building	<ul style="list-style-type: none"> • SO12a: Provide material support to those engaged in REDD+ process • SO12b: Provide technical trainings to those engaged in REDD+ process • SO2b: Adequate financing of forestry institution

12.4.4. Strategic Options to address Underlying causes of Deforestation and Forest Degradation

The analysis in Table 22 below shows that although most of the underlying causes are addressed under the different strategic options, there are gaps in the strategic options in addressing some of the root factors and the underlying causes. The alternative options and relevant activity measures are identified and included in the analysis.

Table 28-Analysis of the strategic options vis-à-vis the underlying causes of deforestation and forest degradation

<i>Underlying causes</i>	<i>Strategic options</i>	<i>Relevant activities under the strategic options</i>
Economic		
Commodity market	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> • SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)
Investment	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> • SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors) • SO1b: Put in place inter-regional coordination institutional arrangements • SO1c: Put in place joint planning among core sectors (agriculture, investment, energy and forestry)
Urbanization	SO4: Promoting Land Use Planning	<ul style="list-style-type: none"> • SO4a: Develop national level land use planning framework guideline • SO4b: Formulate broader regional land use plan
Unemployment	SO11: Promoting supplementary income generation options	<ul style="list-style-type: none"> • SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.) • SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest • SO11d: Increase the forest product value chains
Social		
Poverty	SO11: Promoting supplementary income generation options	<ul style="list-style-type: none"> • SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.) • SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest • SO11d: Increase the forest product value chains

	SO16: Benefit Sharing	<ul style="list-style-type: none"> • SO16a: Equitable distribution of the costs and benefits • SO16b: Solicit stakeholders to participate in REDD+ actions • SO16c: Share benefit to eligible ones accrued from REDD+ action • SO16d: Assists bylaw development of CBOs for benefit share among individual members
Livelihoods	Diversifying livelihoods with non-forest based options	<ul style="list-style-type: none"> • Providing high value crops, improved breeds and skill development trainings to the youth and forest dependent communities in forest areas
Conflicts	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
Gender	SO15: Ensure full participation and equitable benefit sharing for women	<ul style="list-style-type: none"> • SO15a: Main stream gender in REDD+ process to benefit • SO15b: Develop women-specific knowledge on natural resource management
Awareness/education	SO12: Capacity Building	<ul style="list-style-type: none"> • SO12a: Provide material support to those engaged in REDD+ process • SO12b: Provide technical trainings to those engaged in REDD+ process • SO12c: Provide local and international experience sharing to those engaged in REDD+ process
Political		
Equity	Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> • Improve access to social services (education, health, clean water, inputs, finance, etc...)
Resource allocation	Ensuring balanced allocation of resources to the key sectors including forestry	<ul style="list-style-type: none"> • Ensure sufficient financing to the forestry sector
Demographic		
Population growth	Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> • Promote measures to family planning in areas of high population density, especially in forest areas

Migration	Implement measures that regulate in-migration to forest regions (refugees and IDPs)	<ul style="list-style-type: none"> • Work closely with relevant sectors to halt spontaneous migration of people from inside and outside the country to the forest areas
Resettlement	Ensure there is no geographic interface between the OFLP and the Government financed Commune Development Program (CDP)	<ul style="list-style-type: none"> • Preclude and manage any perceived risk associated with the CDP by incorporating the Alignment of Operation procedure in the regular training of city/werada staff (responsible for environmental and social management) to ensure that the OFLP is not knowingly in CDP like activities or in any potential CDP area.
Attitude	Ensure communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> • Increase education and awareness on environmental, economic and social values of forests and their habitats
Values and Beliefs	Increased local community awareness on the intergenerational and ecosystem wide benefits of forests	<ul style="list-style-type: none"> • Conduct awareness creation trainings in forest areas
Policy (land and forest)	SO4: Promoting Land Use Planning	SO4a: Develop national level land use planning framework guideline SO4b: Formulate broader regional and local land use plan
Institutional structure	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> • SO1a: Design collaborative forums to align sectoral engagements in joint planning and implementation including policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors) • SO1b: Put in place inter-regional coordination institutional arrangements
Law enforcement	SO2: Ensuring effective forest governance and law enforcement	<ul style="list-style-type: none"> • SO2a: Protecting natural forest • SO2b: Adequate financing of forestry institution • SO2c: Strengthening of regional and local level governance structures • SO2d: Develop skilled manpower • SO2e: Capacity building of legal practitioners at all levels

Benefit sharing	SO16: Benefit Sharing	<ul style="list-style-type: none"> • SO16a: Equitable distribution of the costs and benefits • SO16b: Solicit stakeholders to participate in REDD+ actions • SO16c: Share benefit to eligible ones accrued from REDD+ action • SO16d: Assists bylaw development of CBOs for benefit share among individual members
Tenure and Use rights	SO3: Ensuring clear forest tenure and property rights	<ul style="list-style-type: none"> • SO3a: Test models for community forest tenure • SO3b: Formulation of fair rights for stakeholders
Corruption	Implement sustainable measures to stop corruption	<ul style="list-style-type: none"> • Ensure improved forest governance, accountability and transparency through citizen engagement, community led development planning, timely resolution of grievances.
Sectoral synergy	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> • SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors) • SO1b: Put in place inter-regional coordination institutional arrangements • SO1c: Put in place joint planning among core sectors (agriculture, energy and forestry)
Capacity	SO12: Capacity Building	<ul style="list-style-type: none"> • SO12a: Provide material support to those engaged in REDD+ process • SO12b: Provide technical trainings to those engaged in REDD+ process • SO12c: Provide local and international experience sharing to those engaged in REDD+ process • Enhance financial, human, structural and material capacity in the sector at the different levels

12.4.5. Potential Environmental and Social Benefits of the Proposed REDD+ Strategic Options

Table 29- Analyses of environmental and social benefits of the proposed strategic options

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
SO1: Enhance cross-sectorial synergies and stakeholder participation-	<ul style="list-style-type: none"> • Help for sustainable reduction of deforestation and forest degradation • Increase natural habitats for biodiversity, and protect water sources and water ways 	<ul style="list-style-type: none"> • create 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, • create legal framework among key stakeholder to reduce deforestation
SO2: Forest governance and law enforcement-	<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 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 	<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 employment generation in Ethiopia • Help hydro power and irrigation dams not to be silted and make them sustainable
SO3: Forest tenure and property right	<ul style="list-style-type: none"> • Enhance natural resource conservation and local community involvement on reduction of deforestation and forest degradation 	<ul style="list-style-type: none"> • Improve incentives or abilities to invest in forest sector • Help community to use their labour, wealth, and creativity in forest management • Help underserved community to access forest resource benefits
SO4: Land use planning	<ul style="list-style-type: none"> • Help reduction of deforestation due to conversion of forest land into other land use. 	<ul style="list-style-type: none"> • increase productivity of agricultural land • reduce conflict between different key actors on land resource

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
	<ul style="list-style-type: none"> • make sustainable and long-term land improvement and management practices 	<ul style="list-style-type: none"> •
<p>SO5: Ensure Sustainable Forest Management-</p>	<ul style="list-style-type: none"> • 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 minimized • Help establishment of forest monitoring system • 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, 	<ul style="list-style-type: none"> • Create partnership between government and community • create access and benefit from forest resource for local community • help respect rights, Change attitudes/ changing roles, • help to address resource use conflicts, Democratic functioning • Enhance participation of local community in forest management • Create partnership between state forestry service and organized villagers • 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 • Make sure the interventions are socially inclusive (gender and inter generationally) of use to underserved peoples and vulnerable groups

Proposed Strategic options	Environmental Benefits	Social Benefits
SO6: Enhancement of forest carbon stock	<ul style="list-style-type: none"> • Improved soil fertility and yields • Reduce pressure on forest resource for fuelwood • soil conservation, erosion control and water conservation • trees planted in agricultural land will help as wind breaks • It help 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 • 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 availably, and the ecological environment will be improve and protect 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 	<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 • 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. • 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 quality of life
SO7: Agricultural intensification-	<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 agriculture will be enhanced 	<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

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
	<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 	<ul style="list-style-type: none"> • Livelihood of the local community will be enhanced • reduce expansion of agriculture • improve agricultural practice • diversify crop production and nutrition
SO8: Reduce demand for fuel wood and charcoal-	<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 	<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 exposure to indoor air pollutants (IAP) such as carbon monoxide and particulate matters which affect women and children
SO9: Increase wood and charcoal supply	<ul style="list-style-type: none"> • More carbon sequestration • Micro-climate improve • 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) • increase on farm species diversity • enhance soil fertility • avoid deforestation by overharvesting of charcoal production 	<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

Proposed Strategic options	Environmental Benefits	Social Benefits
	<ul style="list-style-type: none"> • 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> 	<ul style="list-style-type: none"> • charcoal makers would produce charcoal as their main activity • Increase foreign income, • create job opportunity for youth and landless people • reduce impact of invasive species on range land and farm land
SO10: Improved livestock management-	<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 • reduce pressure on natural resource by keeping animal draft for ploughing 	<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 farmers economic loss • Increase productivity of livestock • secure sustainable household income • increase animal protein supplies to match human needs • Since it is initial investment cost is small it involve young, women and other community in poultry production

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
		<ul style="list-style-type: none"> •Mechanization leads to food self sufficiency • improve livelihoods of smallholder farming communities
SO11: Promote supplementary income generation	<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, <ul style="list-style-type: none"> • 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 forest , • reduce illegal logging on natural forest • help for sustainable management of the forest 	<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 minimized • poor people would have increased adaptive capacity to climate shocks by increasing their

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
		<p>house hold income from direct selling of forest products</p> <ul style="list-style-type: none"> • 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
SO12: Capacity building	<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 	<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 of forest management
SO13: Inter-sectoral coordination on planning and implementation-	<ul style="list-style-type: none"> • strengthen sustainable forest rehabilitation 	<ul style="list-style-type: none"> • reduce conflict among stakeholders working on land resources • harmonize policy conflict • create linkages with different stakeholders
SO14: Demand-driven Research and extension linkage	<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 intuitional set up for the sector 	<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 the sustainable benefits of the community

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
	<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 	<ul style="list-style-type: none"> • establish data base system on forest resources • analyze gaps and provide solution for social problems
SO15: Ensure full participation and equitable benefit for women	<ul style="list-style-type: none"> • help sustainable conservation of forest resources • help sustainable conservation of forest resources 	<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 by planting boundary trees • 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 influence over decision-making processes that define their

<i>Proposed Strategic options</i>	<i>Environmental Benefits</i>	<i>Social</i>
		access to forest rights and resources, and rights to assets, including land and other
SO16: Benefit sharing	<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 	<ul style="list-style-type: none"> • Help to organize community groups and regional government/forest services share the benefits, • ensure poor and underserved/disadvantaged 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

12.4.6. Potential Environmental and Social Risks of the Proposed REDD+ Strategic Options and the Mitigation Measures

Table 30-Analyses of environmental and social risks of the proposed strategic options and the mitigation measures

<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 ME FCC (e.g. law enforcement weakness) 	<ul style="list-style-type: none"> Coordination unit to be assigned at higher Level (Prime Minister Office) that check synergy of the sectoral institutes Assign counterpart (focal person) in each sectoral office that links ME FCC with them 	<ul style="list-style-type: none"> Inefficient social service (education, health, water, market information, etc) from the sectoral office due to absence or little synergy 	<ul style="list-style-type: none"> Enhance synergy Go for alternatives for the forest product and NTFP Develop community reporting system for the inefficient service from each sectoral services
	<ul style="list-style-type: none"> Less likely collaboration of sectoral institutes for joint planning on forest issues 			

<p>O2: Forest governance and law enforcement-</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 	<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 	<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 • Hosts wild animals that may frequently attack livestock of surrounding communities <p>Strong institutions may override community based institutes that protected forest for centuries</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 halts • Supply improved cooking and baking stoves to the community which depends on forest for energy source • Materialize the second phase growth and transformation plan (GTP-II) of Ethiopia that gives due emphasize to renewable energy sources <ul style="list-style-type: none"> • Enhance woodlots which would increase smallholders access to wood products (in the medium term) • Ploughing system shift to low-tillage that is more sustainable, more resilient, more low carbon.
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Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
		& material) to suppress fire incase fire is set <ul style="list-style-type: none"> • Empower underserved grievance redress mechanisms 		<ul style="list-style-type: none"> • Use customary conflict redress mechanism • Enhance the benefit of the community from the enclosed area as per the PF provisions • Compensate as per the market and the RPF provisions • 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 as per the PF • If obstruction of access route is a must, transport facility to use the other route must be arranged as per the PF

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
				<ul style="list-style-type: none"> • Strengthen CBOs like that that of government institutes
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 • Compensate as per the replacement cost and as specified in the legal framework in 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 of land ownership may be induced (e.g. from private to government or vice versa) 	Adequate compensation to be paid by Government both in kind and other means as per the RPF (Note: the World Bank cannot finance land compensation)
SO5: Ensure Sustainable Forest Management-	<ul style="list-style-type: none"> • Create economically driven forest mismanagement that 	<ul style="list-style-type: none"> • Hybrid of PFM and Traditional forest management with scientific management so 	Intervention of PFM if not managed may lead to problem of acceptance by all since the approach does not	PFM should be supported by a legal framework and acceptable policy as well as directives

	<p>may lead to forest degradation</p> <ul style="list-style-type: none"> • 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 • Tragedy of the commons 	<p>that forests utilized based on forest management plan</p> <ul style="list-style-type: none"> • PFM should encompass all community members with agreed benefit sharing mechanism • 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>have legal support under the Ethiopian law</p> <ul style="list-style-type: none"> • PFM experiences in Ethiopia is mainly in a high forests this may have negative impact to adapt in low land woodland areas where there is different socio-economic and ecological conditions • Creates dependency syndrome on local communities because of long term incentivization by implementing projects to protect the resource • 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 	<ul style="list-style-type: none"> • Educate and train communities in the areas about PFM • Assist communities in the low land areas to carry-out experience sharing visit in high land areas • Encourage self-reliance of the PFM groups through enabling them generate their own income from the forest management activities • All community members should have a chance to be PFM members • The PFM bylaw and the legal framework should define the power of the PFM leaders • The leader should be sued in case of default • Equal access rights to all members of the community need to be granted • The PFM bylaw should ensure equal opportunity to all community members
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<i>Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures</i>	<i>Risks</i>	<i>Mitigation measures</i>
SO6: Enhancement of forest carbon stock	<ul style="list-style-type: none"> • Quarantined agroforestry species may become invasive and damage the natural environment • Mono culture practices may be less effective 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) • Aggravate environmental degradation from setting of fires, if some fire susceptible tree species are planted • Aggravate illegal cuttings and destruction of regenerating biodiversity if not managed with the community • Increase conflict between wildlife & humans 	<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 low moisture demand • 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 • 	<ul style="list-style-type: none"> • Existing fragmented land use types of an individual household may end up in reduced productivity • Difficult to introduce due to long gestation period of the trees • Intensive care for the various agroforestry practices consumes the time and energy of household members • 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"> • High costs of seedling production to carry out plantation relative to enrichment plantings 	<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 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 • 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 • Compensate in kind or other means

<i>Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures</i>	<i>Risks</i>	<i>Mitigation measures</i>
	<ul style="list-style-type: none"> • 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"> • Use integrated crop pest management practice • Plant mixed species where monoculture stands are intercropped with crop lands; • Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation • Plant local/underserved tree species • Allow natural regeneration under the monoculture species so that the regenerated species overtake the planation • Use modern silvi-culture methods such as forest residue management, mosaic planting, different tree density on steep slopes, etc. • Use integrated crop pest management practice • Allow undergrowth through wider space planting 	<ul style="list-style-type: none"> • Increase conflict between wildlife & humans increase crop pests (birds, mammals) • 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 Run-off and the development of a protective forest floor. 	<ul style="list-style-type: none"> • Use cut and carry system • Share benefit from the wildlife hunting/ ecotourism so that community feels ownership over the resource • Proportionate the number of livestock with the available resource amount • 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 a must,

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
		<ul style="list-style-type: none"> • Enforce landuse plan to come into force 		<ul style="list-style-type: none"> • 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 • Ensure benefit sharing from the reforestation/ afforestation through their active involvement in the activities including through out grower schemes • 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 a must, another “reasonably convenient” route must be arranged

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
				<ul style="list-style-type: none"> • 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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
S07: 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. • 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 • Lowering of water tables • Water diversions for agriculture are a major problem for many aquatic species. 	<ul style="list-style-type: none"> • 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 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 	<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 • 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 	<ul style="list-style-type: none"> • Encourage agriculture intensification by the use of compost than 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 • Offer continuous and sustained education & awareness creation on the appropriate use of chemicals • Government needs to encourage sustainable agricultural production by small holder farmers and large holdings by community.

<i>Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures</i>	<i>Risks</i>	<i>Mitigation measures</i>
		<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Conflicts between neighboring communities over water resource utilization 	<ul style="list-style-type: none"> • Educate and train community on the benefit of CSA • Assist poor farmers technically and materially through extension services • Harvest excessive water during the high moisture seasons for the later dearth period use

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
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"> 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 high demand areas due to long 	<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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
			production-marketing chain <ul style="list-style-type: none"> • 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 	electricity/fuel efficient stove over the traditional stove <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 • Begin with the few number of farmers and gradually increase it
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 harvesting and transporting time 	<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) 	<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 commercial centers 	<ul style="list-style-type: none"> • Look for potential local and overseas forest products • improve road network in the coming GTP2 years impact on forest • create wood market centers at optimum

<i>Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures</i>	<i>Risks</i>	<i>Mitigation measures</i>
	<ul style="list-style-type: none"> • Adverse micro-climate modification after harvesting • The act induce 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 some tree species planted for charcoal production as they are susceptible to ignition 	<ul style="list-style-type: none"> • Sequesterate 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"> • 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 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 and lungs, burns, eye diseases 	<ul style="list-style-type: none"> distance from 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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
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 	<p>Identify local and oversea markets for the products</p> <ul style="list-style-type: none"> • 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 stock of the forest • Some NTFP expand at the clearance of forest (e.g. 	<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 based on the management plan of the source 	<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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	<p>coffee forest of the country)</p> <ul style="list-style-type: none"> • 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 	<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 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 • 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 • Increased accountability and transparency in the decision making process 	<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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
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
,	<ul style="list-style-type: none"> • REDD+ implementation may results in more deforestation and forest degradation if it carries cost to the community • Late recognizer of the benefit of the REDD+ project may adversely 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation • Give opportunity for the late adopters to become the member and enjoy the benefit 	<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 	<ul style="list-style-type: none"> • Devise mechanism where the REDD+ project absorbs its costs associated with its implementation • There should be policy, strategy and bylaw that define clear benefit sharing mechanism

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	<p>affected the REDD+ project forest</p>		<p>implementation of REDD+ project</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Institutionalize and implement REDD+ 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, e.g., by providing off job opportunities • extend membership to non members • Let all community members participate in the

12.4.7. Suggested Alternative Strategic Options for Further Consideration in line with the environmental and social situations

Table 31-Analyses of the environmental and social benefits of the suggested alternative Strategic Options

<i>Suggested Alternative Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
ASO1: 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 and health, creates job opportunity, increase income
ASO2: 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.
ASO3: 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 fair distribution of services to the needy and more disadvantaged groups of society. • Increases accountability, reduces illegal activities and corruption
ASO4: 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
ASO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> • Ensuring equity and faire distribution of resources will reduce the dependence on 	<ul style="list-style-type: none"> • Ensuring equity improves access to social services (education, health, clean water, inputs, finance, etc...)

<i>Suggested Alternative Strategic options</i>	<i>Environmental Benefits</i>	<i>Social Benefits</i>
	natural resources and avoids the risk of deforestation and degradation	<ul style="list-style-type: none"> • Improves governance and democracy
ASO6: 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
ASO7: 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
ASO8: 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
ASO9: Ensure a well-regulated and managed resettlement program	<ul style="list-style-type: none"> • Revising the policy and enforcing implementation of GoE legal frameworks of to spare forestlands from being used for resettlements and reduce deforestation 	Resettlements are implemented only according to implementation according to the reviewed legal and policy frameworks of GoE and the World Bank as part of the RPF and PF
AOS10: 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
ASO11: 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

12.4.8. Potential environmental and social risks of the proposed Alternative Strategic Options and mitigation measures

Table 32-Analyses of environmental and social risks of the proposed alternative strategic options and the mitigation measures

<i>Alternative Strategic options</i>	<i>Environmental</i>		<i>Social</i>	
	<i>Risks</i>	<i>Mitigation measures</i>	<i>Risks</i>	<i>Mitigation measures</i>
ASO1: 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 	The REDD+ management arrangement is also encompassing the regional states level REDD+ units, regional steering committee and regional technical working group have been functional in Oromia region, with representatives from the forest	<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, such as lack of skills, difficulty with adopting new skills 	<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
ASO2: 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 	The REDD+ management arrangement is also encompassing the regional states level REDD+ units, regional steering committee and regional technical working group have been functional in Oromia region, with representatives from the forest	<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 groups are targeted and included

Alternative Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
ASO3: 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 	<p>The REDD+ management arrangement is also encompassing the regional states level REDD+ units, regional steering committee and regional technical working group have been functional in Oromia region, with representatives from the forest</p>	<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
ASO4: 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 non-compliance is needed
ASO5: 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 	<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

Alternative Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	forest resources for income			
ASO6: 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
ASO7: 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"> 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
ASO8: 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"> 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
ASO9: 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"> Absence of guidelines and exertion of pressure on resettled communities lead to social conflict 	<ul style="list-style-type: none"> Ensure proper guidelines are put in place
AOS10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> Negative attitude towards forests being 	<ul style="list-style-type: none"> Educate local communities on the 	<ul style="list-style-type: none"> Changing attitudes may antagonize local values 	<ul style="list-style-type: none"> Take into account and work through social

Alternative Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	seen as harboring pests leads to deforestation	wider ecological roles and benefits of forests	and beliefs for some groups	values and beliefs when teaching
ASO11: 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"> • 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

13. OFLP Potential Environmental and Social Benefits and Risks and Mitigation Measures

This section aims to briefly present the Potential Environmental and Social Benefits as well as potential implementation risks and challenges

13.2. OFLP Potential Environmental and Social Benefits

The OFLP intervention will have economic, environmental and social benefits to the communities. Some of the key anticipated benefits to the community include,

1. ***Community Participation and Citizen Engagement.*** OFLP would focus on increasing community engagement and participation in forest management and decision-making. It would do so by seeking to: a) increase capacity of the forest communities and citizens to make their own decisions about community-led planning process; b) increase the capacity and responsiveness of regional and Woreda administrations to respond to citizens demand, and c) support channels where citizens and various levels of government can work together in the context of implementation and monitoring of community-led forest management. Citizen feedback and a series of consultation with community members, government officials, and representatives of CSOs were conducted in the design of OFLP and feedback on the sub-project process would continue during implementation.
2. ***Livelihood Assets/Human Capital:*** the knowledge, skills and experiences coming directly and indirectly from the OFLP enhances their livelihood assets and improve human capital which is a key aspect of wellbeing for better life. Developing sustainable livelihoods for the communities in the OFLP intervention areas provide new job opportunities (unlocks new livelihood opportunities such as NTFPs, adoption of new agri-business models, community based tourism, hunting as a leisure sport), improved agricultural productivity and access to agricultural extension services, better education and health, protection, preservation and sustainable use of traditional medicinal plant species.
3. ***Financial capital:*** the OFLP on the ground investments activities will build financial assets using PFMs and cooperatives through savings and dividends in membership shares. The income from the non-forest timber products will improve the financial status of the communities. Finance is accumulated in liquid form it will help communities withstand shocks through converting in to different livelihood requirements unlike without OFLP scenarios.
4. ***Physical capital:*** OFLP will build communities capacity to access clean and affordable energy, securing better quality shelter, ability to afford agricultural equipment for improved productivity through agricultural intensification, and other basic infrastructure.
5. ***Social capital:*** networking within their communities, membership to PFM and other OFLP related cooperatives which often bring about adherence to mutually agreed rules, norms and sanctions enhances the community's connectedness. Besides, it will help communities develop trust and cooperation in accessing or use of forest and non-forest resources that strengthen social capital. It also enhances their capacity to negotiate, consult and decide about the matters that affect their livelihoods and living contexts. The quality and frequency of community consultations and empowerment activities will determine the development of

good forest governance system, transparency in resource management and avert the risk of corruption (elite capture). OFLP will make use of local institutions of grievance redress and resource management, which in turn enhances social capital.

6. **Gender:** The OFLP will mainstream gender equality in sharing program benefits and strengthen grievance redress as part of citizen engagement aimed at listening to stakeholders and seeking their consensus on OFLP-related activities. OFLP activities would be gender sensitive, including such aspects as household energy demand management, household livelihoods support activities, community forest tenure piloting, and the scaling up of PFM structures. The OFLP benefit sharing mechanism design process, safeguards implementation, community participation and citizen engagement issues, would also include efforts to ensure and enhance female involvement. M&E indicators would be disaggregated by gender to inform OFLP's adaptive management.
7. **Policies and institutions:** the benefits on this dimension could be explored at two levels, region and community. At the **regional level**, the OFLP will support the enabling environment establishment/strengthening of institutions, legal frameworks, fair play rules on forest related resources, benefit sharing mechanisms, safeguards, MRV, etc. **The community** based membership institutions gives the communities planned land use through agricultural intensification and enhances tenure security. PFMs serve as institutional systems for the local community to enhance the forest governance and building social cohesion. The cooperatives and affiliated institutions will give communities a bargaining power to negotiate on tenure security and influence the policy environment. The cooperative bylaws set rules and legally binding provisions among members alike to manage, protect, prevent and use the resources sustainably.

13.3. Potential Implementation Risks and Challenges

13.3.2. Land Governance Risks

- **Land tenure risks at Household and Community level:** New global research is emerging that shows that community managed forests around the world tend to be more carbon-rich than other forests; as such, recognizing and enforcing the legal rights of forest communities presents an enormous opportunity to fight climate change (WRI, 2014) yet also presents a risk. Communities and landholders still face a perception of land tenure insecurity in Ethiopia. This is particularly important in forested areas, since individual land certificates are not issues. Although, PFM goes some way in addressing this perceived lack of security by transferring forest management rights to communities through contracts, this could be strengthened through individual land certification in forest areas (although OFLP is not financing this). The GoE, meanwhile is aiming to allow community tenure of forests if anticipated legal reforms in 2015 are realized. The GoE's effort to improve individual land tenure is being supported outside OFLP through activities to improve land certification financed by the WBG-financed SLM Program and the new UK-financed LIFT program.
- **Commune Development Program (CDP) Perceived Risk:** Although there is no geographic interface between this project and the Government financed Commune Development Program (CDP). There may be substantial risk, if the OFLP is perceived to be supporting the Commune Program in communities in which the Program has not been well implemented.

In agreement with Government and based on the ongoing Alignment Study, an approach will be applied to ensure that the OFLP is not knowingly supporting commune centers/communities. To preclude and manage any perceived risk associated with the CDP, the Alignment of Operation procedure will be incorporated in the regular training of city/werada staff who are responsible for environmental and social management to ensure that this project is not knowingly CDP like activities or in any potential CDP area.

- *Land to Investors Risks:* GoE has developed an attractive agriculture land policy which is encouraging many private investments (both foreign and domestic) in large-scale commercial farms to invest in Ethiopia. This policy is anchored on favorable land acquisition process; provision of infrastructure, and improving labor supply. Thus, the Federal GoE and regional administrations coordinate efforts and work together to this end. The Ministry of Agriculture has established “Agricultural Investment Land Administration Agency (AILAA)” under the Council of Ministers Regulation No. 283/2013 for facilitating agricultural investment along with land administration and transfer processes. AILAA has 3.6 million ha land to grant for investors in Oromia (almost one third 1,057,866 ha), Benishangul Gumuz, Gambella and the Southern regions. (Desalegn, 2011, Fortune, *DEC 30, 2012 [VOL 13 ,NO 661]*) Thus, it is likely that OFLP may face land to investors’ risk.

Community Consultation Identified Risks

- *Existing and potential PFMs Inclusiveness:* While PFM is inherently participatory there may be concerns due to population explosion, demand for agricultural land and livestock stock increase in the PFM arrangement. This would lead to limited participation and little or no benefit for the community. The PFMs may exclude resource poor and vulnerable forest dependent communities might.
- *Inadequate attention to underserved and vulnerable groups:* OFLP might likely face social concerns related to the existence of underserved and vulnerable groups in its intervention areas. These might be exacerbated by inadequate implementation capacity and understanding of relevant social issues.
- *OFLP Related Grievances and Resource use Conflicts:* Communities and individuals in OFLP related operational sites may believe that they are adversely affected by the Program. OFLP might be challenged by the weak institutional capacity of traditional grievance redress and resource management institutions. In addition, restriction of access to natural resources due to OFLP intervention might induce resource use conflict among traditional seasonal migrant forest users including pastoralists.
- *Forest Governance and Corruption Concerns:* OFLP may encounter forest governance and corruption challenges if the Program development opportunities end up benefiting the powerful, resource rich and the elite groups. At times, indifference of the local people including the leadership towards displaced persons and destruction of resources could be another area requiring improved governance during OFLP lifetime. Moreover, absence of guidelines and exertion of pressure on resettled communities might lead to social conflict.

13.4. Social Development Plan (SDP) for OFLP

This Social Development Plan, as outlined below, will ensure that the OFLP implementation will respect the dignity, rights and culture of groups meeting the OP 4.10 requirements and ensure that these people benefit from the Program in a sustainable manner. The SDP could be revisited during

OFLP implementation and further consultation undertaken for the underserved groups to ensure their full participation. With respect to the anticipated key risks and mitigation section outlined, the matrix below provides the summary of potential risks and challenges as well as recommendations.

Table 33-Social Development Plan (SDP) for OFLP

OFLP Component/Issues	Potential Risks and Challenges	Recommendations
Component 1: Enabling Investments (US\$ 10.8 million RE grant, 5-year period)		
<i>1.1 Land Use Planning support at Woreda and Community Levels</i>	<p>Land Tenure</p> <ul style="list-style-type: none"> OFLP could face challenges related with existing weak land tenure at individual and community levels due to the perception of land tenure insecurity, mainly in the forest sector Forest demarcation if any (as part of the Integrated Land Use Planning) may induce conflict and result in relocation of people and restrict access to resources 	<ul style="list-style-type: none"> OFLP should promote PFM to address perceived lack of tenure security by transferring or promoting joint forest management rights to communities using defined contracts OFLP as a coordination platform will complement the GoE's effort on rural land certification by encouraging other projects to finance, outside the scope of OFLP, the first steps toward individual land certification in forested areas OFLP will address restriction of access through its Process Framework
<i>1.2 Extension Services</i>	<ul style="list-style-type: none"> OFLP may encounter resistance and low capacity to adopt new technologies and practices in forest, agriculture, water, and energy sectors 	<ul style="list-style-type: none"> OFLP Coordination Staff including safeguard team at all levels should conduct intensive consultation and participation to create awareness Build capacity of actors at all levels to understand, promote and adopt improved technologies.
<i>1.3 Forest Management Investment in Deforestation Hotspots (49 Woredas)</i>	<ul style="list-style-type: none"> OFLP may face concerns in existing PFMs due to population explosion, demand for agricultural land and livestock stock increase 	<ul style="list-style-type: none"> OFLP-supported PFM promotion should draw lessons from ongoing PFM interventions, ensure that the process remains consultative and participatory, and capitalize on mechanism of non-forest based resources benefits
	<ul style="list-style-type: none"> The achievements of OFLP might be compromised by limited participation and little or no benefit for the community in conservation initiative such as PFM 	<ul style="list-style-type: none"> Ensure broad based consultation and mobilization of communities during the formation phase of PFM groups to make sure that communities draw proportional benefits from forest resources and sustainable forest management
	<ul style="list-style-type: none"> Conflicts may arise between PFM and non-PFM community members 	<ul style="list-style-type: none"> Allocate quota for vulnerable and underserved groups in PFM establishment Ensure establishment process of PFM groups is equitable, fair and participatory

	<ul style="list-style-type: none"> • OFLP implementation may serve as a fertile ground for external actors and influential individuals for instigating conflict and/or disagreement 	<ul style="list-style-type: none"> • OFLP should be inclusive of relevant stakeholders, CBOs, GOs, NGOs, local institutions and influential individuals
	<ul style="list-style-type: none"> • Restriction over natural resources, spiritual exercise, use and ownership rights may create social instability 	<ul style="list-style-type: none"> • OFLP should allow communities to have access for spiritual exercise
	<ul style="list-style-type: none"> • OFLP on the ground investments may obstruct community walking routes living on either side of the forest due to PFM area closure and conservation 	<ul style="list-style-type: none"> • OFLP on the ground investments should allow communities to use the routes or establish/identify reasonably convenient alternative routes.
	<ul style="list-style-type: none"> • OFLP may face challenges in enhancing or introducing new livelihoods as alternative options to forest degradation and depletion 	<ul style="list-style-type: none"> • Provide the necessary training and awareness on enhancing existing, new livelihood and resource alternatives • Promote community based tourism (where it is economically and financially viable, noting that OFLP is not directly financing tourism), and other nature-based or conventional small and medium enterprises for alternative livelihoods • Support the design of Forest Community based initiatives on sustainable forest management that will last beyond the grant periods
	<ul style="list-style-type: none"> • OFLP may encounter forest governance and corruption challenges <ul style="list-style-type: none"> i. The Program development opportunities may end up benefiting the powerful, resource rich and the elite groups ii. Indifference of the local people including the leadership towards displaced persons and destruction of resources iii. Absence of guidelines and exertion of pressure on resettled communities lead to social conflict 	<ul style="list-style-type: none"> • Put in place a mechanism to ensure the resource poor and the disadvantaged are targeted and included • Ensure fair representation and accountability in forest related institutions such as PFMs including underserved communities • Ensure that mitigation measures are applied impartially regardless of status, power, or connections • Ensure that all forest related OFLP guidelines reflect the issues and concerns of underserved and vulnerable groups

	<ul style="list-style-type: none"> OFLP operation may induce conflict due to traditional resource access and utilization 	<ul style="list-style-type: none"> Use context specific conflict resolution mechanism such as, the <i>Gadda system</i> and/or <i>Awlia</i> Support traditional resource access and use mechanisms in different parts of the OFLP operation, including <i>Godantu, Qobbo</i>
	<ul style="list-style-type: none"> <i>‘Illegal migrants’ or Squatters:</i> OFLP may face challenges related with illegal migrants or squatters in its operation area 	<ul style="list-style-type: none"> Address the issue of squatters or illegal migrants as a concern through the OFLP RPF and PF provisions: including compensation, resettlement assistance, alternative livelihood support and rehabilitation assistance
Component 2. Enabling Environment (US\$ 6.4 million RE grant, 5-year period)		
<ul style="list-style-type: none"> <i>Institutions</i> <i>Incentives</i> <i>Information</i> <i>Safeguards Management</i> 	<ul style="list-style-type: none"> OFLP would likely face social concerns related to the existence of underserved and vulnerable groups in its intervention areas OFLP may face inadequate understanding of relevant social issues OFLP may operate in weak capacity and expertise within the government structures to deal with both social and environmental risks, properly mitigate and document the process 	<ul style="list-style-type: none"> OFLP should dedicate a safeguards sub component to address operational risks OFLP need to carefully design safeguards capacity building measures Ensure direct and all-inclusive community consultation about OFLP Use OFLP communications and participation strategies to sensitize the underserved and vulnerable groups
	<ul style="list-style-type: none"> Communities and individuals in OFLP operation sites may believe that they are adversely affected by the Program OFLP might be challenged by the weak institutional capacity of traditional grievance redress and resource management institutions Restriction of access to natural resources due to OFLP intervention might inflict conflict among traditional seasonal migrant forest resource 	<ul style="list-style-type: none"> Community consultations and participation should create awareness about the OFLP Grievance Redress Mechanism to support citizen’s complaints or grievances in a formalized, transparent, cost-effective, and time bound manner Use the <i>Gadaa</i> system in case grievance occur (<i>Abbaa Allenga/Lagaa/Abbaa Ollaa</i> are the institution that serve the community to resolve conflicts rather than the formal court)

	<p>users including pastoralists</p> <p><i>Vulnerable and underserved groups</i></p> <ul style="list-style-type: none"> • The resource poor and the vulnerable forest dependent communities might be excluded • OFLP measures might include or exclude certain social groups through the process 	<ul style="list-style-type: none"> • OFLP will promote CDD-approach, whereby communities prioritize development activities and promote socially-inclusive, participatory processes for planning, sub-project implementation, monitoring and learning. In this way, the people directly affected by the project activities will be treated fairly and equitably; and project funds will be shared in a socially inclusive manner among different groups within communities, particularly the underserved and vulnerable. • Use the OFLP citizen engagement and participation plans to engage communities in the OFLP design, implementation and follow up process
	<ul style="list-style-type: none"> • OFLP operations may not be gender sensitive and women might be affected differentially 	<ul style="list-style-type: none"> • OFLP enabling environment and investment will mainstream gender and be gender sensitive to address the strategic and practical while ensuring equity in the OFLP process and screening of subproject activities will be done through the gender lens. • The OFLP benefit sharing mechanism design process, safeguards implementation, community participation and citizen engagement issues, would also include efforts to ensure and enhance women's participation.
	<p><i>Awareness and communication</i></p> <ul style="list-style-type: none"> • The illiterate and disadvantaged groups of the community might be left out from the program opportunities • Some religious and social groups might oppose the OFLP operation • Changing attitudes may antagonize local values and beliefs for some groups 	<ul style="list-style-type: none"> • OFLP would focus on increasing community engagement and participation in forest management and decision-making of all forest dependent groups and social class. • Boost capacity of forest dependent communities to make their own decisions about community-led planning process • Support channels where citizens and various levels of government can work together in the context of implementation and monitoring of community-led PFM • Support implementation with sufficient awareness creation trainings and through full participation of social groups • OFLP should ensure that all consultations

		and awareness creation meetings respect the values, beliefs and identity of the people
	<ul style="list-style-type: none"> • Potential perception of linkage between OFLP and the potential involuntary resettlement in Bale Mountains National Park. 	<ul style="list-style-type: none"> • Ensure that the GoE apply WBG safeguard policies in managing this resettlement if and when it occurs
Component 3. Emissions Reductions (ER) Payments (US\$ 50 million ERPA, 10-year period)		
<ul style="list-style-type: none"> • <i>Incentive for greater uptake of sustainable land use actions</i> • <i>Adoption and implementation of a BSM by GoE-Oromia Government</i> 	<ul style="list-style-type: none"> • Benefits associated with emissions reductions payments may not reach the stakeholders (elite capture, exclusion of some stakeholders, particularly underserved and vulnerable groups) • OFLP during the ERPA period may not maintain the safeguards system or BSM established during the Grant period 	<ul style="list-style-type: none"> • Develop a well-consulted and equitable BSM for carbon payments to help incentivize forest communities conserve and rehabilitate forest (An approved BSM is a requirement for signing the ERPA) • OFLP should preclude and manage safeguard risk through establishing a robust safeguard system in the Grant period, and strengthened during the ERPA period to ensure that the program's citizen engagement, equitable sharing of Program benefits, GRM and safeguards risks management steps are sustained beyond the Grant period; and GoE will allocate adequate resources (human and financial) for safeguards implementation/ due diligence.

14. Observations and Recommendations

14.2. General

The REDD+ program has full package of the right instruments to address the prevailing social and environmental problems entangling the forest sector in Ethiopia. It is the right instrument to effectively reverse the millennial process of deforestation and forest degradation in the country, if rightly implemented with the required institutional reforms. The causes of deforestation are deeply rooted in the economic, social, institutional, cultural, and political and governance layers of the country. The strategic options are designed to address these drivers at the respective scales and the impacts of those options are largely positive. However, in order to achieve the expected positive changes in the forest governance system, there must be commitment and strong will at the political level and work strategically to bring social behavioral change. As it is made clear in the assessment, there are very diverse array of stakeholders in the sector. Thus, for a successful implementation of the REDD+ program, continued engagement and dialogue with the stakeholders is essential to bring about appropriate reforms in the legislative and policy instruments and the implementation mechanisms.

The level of awareness on REDD+ is generally low in the regions. Conducting awareness creation workshops, distributing promotional materials, and expanding support for local capacity building on forest sector development and law enforcement should be part of the preparedness process. In line with this, those areas that require capacity building support are educating the wider community about the intergenerational significance of forests and their habitats in general and the long-term environmental stability and agricultural productivity at the local level. In addition, issues in the awareness creation and education program to educate the local governments, investors and the wider public should include the role of forests in mitigating the looming climate change impacts, in enhancing local livelihoods and on the significance of law enforcement.

There is sufficient and accumulated positive experience in the country on the practices of area ex-closures for environmental rehabilitation and biodiversity restoration. In some cases, farmland ex-closures are also introduced and successful results are reported. However, the practice of free grazing is a serious challenge for sustainability. Grazing management and control is essential to ensure sustainable forest conservation and degraded are restoration.

Agricultural intensification is feasible in the current context, according to the information collected from the field observations. Nevertheless, availability of inputs and technology (equipment for line seeding or row planting and fertilizer application) are critically lacking. The other barrier will be the availability and cost of inputs, particularly improved seeds and capital.

As the rural mass largely depends on biomass energy source (particularly fuel wood and charcoal) for cooking and lighting. Much of this is extracted from the natural vegetation including high forests and woodlands. From the regional assessment, the team has learned that there is increasing interest to initiate and be engaged in commercial tree planting such as community forests and industrial plantations. However, there are challenges in management and benefit sharing in the forest sector. Thus, such initiatives have to start with piloting with interested groups, farmers associations and local administrations. Positive results from such pilots can be scaled up later.

14.3. Environmental

As learned from the field assessment, the views of great majority of stakeholders, road construction and mining activities are believed to have caused extensive deforestation in different parts of the country. However, there are no proper records and accounts on the magnitude and extent of deforestation caused by such activities. This requires to closely work together with the Roads and Transport Authority and the Ministry of Mines, Petroleum and Natural Gas in order to have accurate estimates of the destruction and thus, to avoid such destruction in the future. This also requires joint planning and implementation among the respective institutions.

Invasive Alien species are serious environmental and social threats in most parts of the country, particularly in Afar and Borana areas, causing biodiversity degradation and loss. Therefore, the strategic interventions should consider controlling the expansion and dissemination of such species into new environments and support the eradication efforts. In addition, the quarantine system of the country need to be revisited and strengthen in order prevent the introduction of new IAS into the country.

Forest demarcation is essential to protect and conserve the existing forests from further deforestation and forest degradation. However, the field assessment result revealed that some of the recently demarcated forests under the jurisdiction of the Oromia Forest and Wildlife Enterprise (OFWE) are being cleared at an alarming rate and changed to 'coffee and enset' farms (e.g., in Odo Shakiso Woreda of the Oromia region). It has been a great challenge for OFWE to exercise law enforcement by the respective legal apparatus and the failure of the local administration to take corrective actions at the local level. Thus, forest demarcation has to be done very cautiously. It is generally recommended that the regional forest enterprises (OFWE, Amhara Region Forest Enterprise) have to get strong legal support to rightly administer the forest concessions.

14.4. Social

The experience in the country for benefit sharing is scanty. There is no good model of such a mechanism to build on for the REDD+ process. The proceeds collected from different sources in different types of forest conservation associations (e.g., PFM and JFM), are not properly shared to those who have formed the legal associations. Therefore, the benefit sharing mechanisms in those existing forest management initiatives are subject to further tests before adoption.

Gender disparity is a reality when it comes to resource ownership and entitlement for women and men, especially in the rural areas. Hence, women are economically and culturally disadvantaged groups, which often lead to women being engaged in exploiting "free access" resources to generate their own income (e.g., fire wood and other forest products). Therefore, gender mainstreaming in development plans and programs (that can benefit both women and men equally) is essential for the success of REDD+ Program.

The program's anticipated social impacts have triggered OP/BP 4.12 and OP/BP 4.10, and the program has put in place mitigation mechanisms acceptable to the World Bank to mitigate these impacts. For impact on land and properties, the Resettlement Policy Framework (RPF) will be used and for restriction of access, Process framework will be used to address any potential impacts, which are expected to be site specific. The Bank's OP 4.10 is triggered based on the screening conducted by the World Bank and reinforced by the constitution of Ethiopia, which indicate that the majority of the target population identify themselves as having the characteristics defined under OP 4.10. Therefore, issues relating to PAPs meeting the OP 4.10 requirements is defined in detail through "Enhanced Social Assessment and Consultation," (part of this SESA) which identified social

issues and economic opportunities for the underserved groups. Key stakeholders have been consulted in the Woredas, Kebeles and communities, including identified vulnerable and underserved groups to seek their broad support for the program and the importance of the program to themselves and their families. The findings of the enhanced social assessment and extensive consultations, including measures to ensure the provision of grievance redress, and benefit sharing issues, and the identified mitigating measures are incorporated in the design of OFLP.

14.5. Legal, Institutional and Policy

The Federal forest proclamation designates forest ownership as state (government) and private. Community forest is considered as part of the private forest and is not treated separately. Whereas, the regional proclamations recognize community ownership separately with different provisions (e.g., Oromia region). Community ownership creates suitable opportunity to organize local farmers into user associations and beneficiary groups. Thus, there is a need to review the Federal forest proclamation clearly define and recognize community forest ownership as different from private ownership, which is crucial for involvement of the community in the development of the sector and for the implementation of REDD+.

The GoE (2014) revised forest definition has a short coming that might instigate further deforestation in one particular vegetation type. The revised definition excludes shrubs land (less than 2 meter height), which covers quite extensive area in the country and this might instigate clearing such vegetation for other land uses or it might lead to the replacement of such natural vegetation exotic plantation forest species. Therefore, it might be beneficial if the height of a tree in the definition be lower than five meters so that important shrub vegetation species, which often have a height of less than five meter, and such vegetation types will be saved from destruction.

Although REDD+ is recognized as an instrument in the CRGE to achieve the forestry sector emission reduction objective, other sectoral project formulations and implementations need to be aligned with the CRGE to reduce emissions and maximize a carbon neutral development gains. Review of the existing environmental instruments and discussions with stakeholders revealed that Ethiopia has no proclamation on strategic environmental and social assessment (SEA), other than the project based EIA proclamation (Proc. No. 299/2002). This may pose a challenge in the proper implementation of the SESA/ESMF in the future. There is a need to formulate strategic environmental and social assessment policy and guideline. This was also a concern shared by the Federal stakeholders such as the Agency dealing with issuing of agricultural investment lands.

Review of the national draft ESIA (Environmental and Social Impact Assessment) guideline has revealed that it has essentially missed concepts on REDD+. Since MEFCC is currently reviewing the existing environmental law, it will be an opportunity to include concepts of REDD+ (e.g., the purposes and linkages of REDD+ to environmental sustainability) in the revised document.

Based on the discussions with stakeholders and the client as well as reviewing the relevant available documents it was learned that Ethiopia has no ESA (Environmental and Social Auditing)

guidance. It is recommended the country should develop its own ESA guideline for carrying out environmental and social audit later after implementing the REDD+ projects.

In the EIA Proclamation No.299/2002, development projects including agricultural investments that have impact on forest resources are required to undertake EIA and the EIA report to be reviewed by the competent agencies (regional or federal environment offices). The proclamation mandated the competent Federal agency and Regional environment bureaus to review the EIA reports to avoid conflicts of interest. Against this legal provision, the Federal agency (now MEFCC) transferred its mandate to the implementing and/or investment licensing sectoral Ministers to provide environmental clearance to projects. This violation of the proclamation needs to be reviewed and corrective measures have to be taken accordingly.

Proclamation No. 691/2010 vests power to the MoANR to protect natural resources and conserve biodiversity. There is no clear definition of natural resources that it is mandated to protect and conserve. This is an example of overlap in mandates with the other sectors like MEFCC and will create gap in addressing key problems around the forest resources.

Strong synergy is needed among the relevant institutions and organizations not only the traditional vertical relationship but also horizontal.

Inclusion of traditional local institutions (e.g., Aba Gadaa, in Oromia, Gepitato in Sheo) will contribute to the successful implementation of REDD+ projects. The adoption of forest conservation experiences from the indigenous forest user associations such as WAJIB and WaBuB will significantly contribute to the successful implementation of REDD+ projects.

There is a clear gap in cross-sectoral coordination in joint planning and implementation of projects and programs. This needs to be seriously looked at and synergy coordination office should be established and be accountable to a higher level of government.

The national REDD+ program needs to build on the experience gained by some NGOs, such as FARM Africa, SOS-Sahel and World Vision Ethiopia and Ethio-Wetlands, in preparing and implementing pilot REDD+ and CDM projects, closely work with them in future projects.

Though regional states (governments) seem to have their own laws and regulations, their implementations were observed as very weak because of poor institutional structures with responsibilities to handle the forest sector. Inadequate awareness of legal institutions has also contributed to the poor implementation of regional legal frameworks. As land is one of the major natural resources, it is not surprising that it has got the most regional concerns. Regional states such as Amhara, Oromia, SNNPRS, Tigray, Gambela and Benishangu-IGumuz established land administration offices to implement the Federal and regional land laws. In most of these regions, the land administration section was within the agriculture bureau. Later on, the Amhara and Oromia regions have established it as a separate bureau merging with environmental protection authority.

Tenure right can be better ensured through strong land administration institutions that oversee equitable and transparent resource use. This requires improving the organizational structure and building the human power capacity in the fields of land registration, cadastral surveying, land laws, communications, land valuation and compensation. Land administration units should be established separate from bureaus of agriculture in all regions. Frequent restructuring and rapid turnover of staff in the regional states is a problem that needs to be addressed.

With its currently existing structure, MEFCC may face challenges in implementing REDD+ projects because its structure is only at the federal level and has not yet been strongly represented in the existing structures in the regions. Hence it is recommended that the Ministry should be represented at the hierarchical administration levels (Region, Zone, Woreda and Kebele) to effectively implement REDD+ and non-REDD+ projects.

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16. Annex

Annex 1: Terms of Reference

Terms of Reference (ToR) for the Strategic Environmental and Social Assessment (SESA) and Environmental Social Management Framework (ESMF) formulation for the REDD+ Process in Ethiopia

Part I. Strategic Environmental and Social Assessment (SESA)

1. Introduction

Ethiopia was selected as a REDD+ country participant in the FCPF in 2008. The Government started preparation of a Readiness Preparation Proposal (R-PP) in April 2010, involving various analyses of the current issues around forest cover loss in the country through a highly participatory process. The final R-PP of Ethiopia, which was approved in Vietnam in March 2011, will cost about US\$14 million to implement. The World Bank, as Trustee of the FCPF, has provided US\$3.6 million for the implementation of key activities identified in the R-PP Assessment Note, leaving a financing gap of about US\$11 million that would have to be secured from other sources. The activities include support to the national readiness management arrangements, support to the design of the national REDD+ strategy and preparation of the national REDD+ implementation framework. It should be noted that REDD+ is a key pillar of Ethiopia's Climate Resilient and Green Economy Vision.

The REDD+ Readiness process should ensure that implementation of proposed programs and activities will not cause adverse social and environmental impacts, while striving to enhance benefits for local communities and the environment. Countries participating in Readiness activities with support from the FCPF are required to undertake a Strategic Environmental and Social Assessment (SESA) to assess the potential impacts from national REDD+ programs and policies, formulate alternatives and develop mitigation strategies. SESA offers a platform for consultation to integrate social and environmental concerns into the policy-making process of REDD+. SESA is complemented by an Environmental and Social Management Framework (ESMF), which establishes the principles, guidelines, and procedures for reducing, mitigating, and/or off-setting potential adverse environmental and social impacts, enhancing positive impacts and opportunities, and otherwise guiding potential investments towards compliance with relevant safeguards.

The SESA is a tool that seeks to integrate social and environmental considerations into policy-making processes, leading to more sustainable REDD+ policies and programs. It supports the design of the national REDD+ policy framework, including the National REDD+ Strategy.

Objectives

SESA aims to ensure that environmental and social issues and risks are addressed from an early stage in the process of formulating REDD Policy and programs, and incorporated throughout this process.

The specific purpose of the SESA is to identify opportunities that:

- Facilitate an understanding of the operating environment for REDD+ programs, including stakeholder analysis and the socio-environmental dimensions of the forestry sector in Ethiopia;
- Identify potential environmental and social impacts related to REDD+ programs in Ethiopia; (the SESA process should ensure full coherence and coordination with the ongoing institutional and legal assessment, including benefit sharing for REDD+ in Ethiopia, led by the WB)
- Design enhanced stakeholder's consultation and participation approach to mitigate and/or enhance the identified impacts;
- Suggest methods and measures to mitigate environmental and socioeconomic risks during REDD+ strategy implementation;

Scope of Work

The Strategic Environmental and Social Assessment (SESA) will encompass stakeholder analysis, a description of the initial social and environmental situation of the forestry sector in Ethiopia, an analysis of the possible impacts of different REDD+ strategy option scenarios, an analysis of impacts of different REDD+ alternatives and the verification of compliance with World Bank policies.

3.1. Major tasks

Task 1: Identifying key issues and assessment of key stakeholders

The consultants shall review and update the comprehensive list of stakeholders identified during R- PP development that are directly linked with the social and environmental impacts of the REDD+ readiness and implementation process, giving attention to the underserved populations and other forest dwellers. The consultants shall prepare a map of the stakeholder's landscape including the positions and views of various stakeholders in the forestry sector, with a particular focus on REDD+ programs. The consultants shall identify and focus on those stakeholders who have been most actively engaged in the process so far and critically assess if any group of stakeholders has been left out of the process due to lacking awareness and capacity to engage with REDD+ discussions.

Task 2: Initial description of the social and environmental situation of the forestry sector in Ethiopia
This task provides an update of the diagnostic already done for the R-PP and draws on the detailed studies of environmental and social issues regarding REDD+. The consultants will collect, analyze and present basic data relating to the current environmental and social situation of the forestry sector in Ethiopia, including:

A map of the forest dependent communities and under-served groups accessing forest resources (following the lines of the stakeholder analysis);

Review of forest dependent community relationship to the forests from an ethnic, historical, cultural and economic perspective.

Analysis of their attachments, access to and use of forest resources, including the formal/ informal institutions and internal mechanisms regarding the use of forests and equitable distribution of benefits from this utilization;

Assessment of issues and options related to land tenure and land rights, conflict resolution mechanisms, and natural resource management and benefit sharing mechanisms;
A summary of their views, concerns and recommendations for REDD+ program.

Task 3: Outline the legislative, regulatory, and policy regime

The outline of the legislative, regulatory, and policy regime (in relation to forest resources management, land use, forest-based enterprises, etc.) should draw from the assessment described in Section 2c of the R-PP template with a focus on any proposed reforms to this regime as part of the REDD+ strategy implementation. This part of the analysis must include:

A review of relevant Environmental impact assessment guidelines, regulations and government policies regarding gaps for addressing environmental and social impacts/ effects including conflict and grievance redress mechanisms;

Task 5: Formulation of arrangements for implementation

The consultants shall prepare a description of the required arrangements for implementation modalities with a focus on the procedures for (i) screening and assessment of site-specific environmental and social impacts; (ii) the preparation of time-bound action plans for reducing, mitigating, and/or offsetting any adverse impacts; (iii) Coordination, facilitation, monitoring the implementation of the action plans, including arrangements for the participation of relevant stakeholders in such monitoring. The consultants will seek guidance from the REDD+ Coordination office, with inputs from the SESA, Consultation and Participation Working Group.

Task 6. Review particular institutional requirements within the REDD+ implementation framework

Review the influence and ability of institutions at different administrative levels (e.g. Kebele, Woreda, Zonal, regional, and Federal), also in view of their capacity to manage and monitor ESMF implementation. The analysis should draw mainly from the R-PP template but may propose new acts, rules and regulations, new agencies or agency functions, staffing needs, inter-sectoral arrangements, management procedures, operation monitoring and maintenance arrangements, budgeting and financial support. Particular attention should be paid to the new safeguard policies and requirements arising from the CRGE Facility.

Task 7: Analysis of the possible impacts of different REDD+ strategy option scenarios

The consultants will analyze the social and environmental impacts of each strategic option. This will help the implementing agency to move the program in the right direction for poverty reduction, environmental protection, socioeconomic development and the protection of traditional rights and biodiversity.

TASK 8: Preparation of final SESA documents

Compiling of a SESA consultation reports process report that provides the findings and recommendations that have emerged from the SESA process. This will be an inclusive documentation of the SESA specific consultations;

This report would, at a minimum, achieve the following:

Identify the key REDD+ social and environmental impacts emerging from the SESA analyses and

consultations.

Based on analyses and consultations, describe the policy, legal, regulatory, institutional, and capacity gaps to implement REDD+ and to manage the key environmental and social issues relevant to REDD+.

Identify, analyze, evaluate and mitigate/enhance impacts of policy options so as to maximize the positive impacts and avoid or minimize the negative ones.

Present recommendations for REDD+ policy design, implementation, and monitoring and evaluation (including legal and policy reforms) based on the results of the SESA.

Formulate policy recommendations for a policy framework to address key environmental and social impacts, and for addressing institutional and governance weaknesses.

Identify any gaps in knowledge where additional data-gathering and analysis may be needed.

Refine REDD+ Strategy options as outlined in the Ethiopia R-PP.

Prepare an Environmental and Social Management Framework (ESMF). The ESMF would apply to future REDD+ activities in the country financed through UNFCCC, the FCPF, UN-REDD or by other donors willing to use safeguards governing programs developed under the three processes.

Task 9: Present preliminary findings on Environmental & social risks and gaps

Present preliminary findings on Environmental & Social risks and gaps from the assessment work and analytical work undertaken. The preliminary findings will be presented to the stakeholders to stimulate a discussion and further en-rich the document.

Task 10: Enhanced and targeted stakeholder consultation

The consultants should seek to carry out targeted consultations on the REDD+ strategy options for Ethiopia, paying particular attention to the forest dwellers and the under-served populations. These consultations should be culturally appropriate, taking into account the diversity of Ethiopia people, regions and languages. These consultations should target all relevant stakeholders, including in the Woredas, and Kebeles.

4. Methodology

According to the scope of work, the ToRs outline a SESA process which should be followed in delivering the required work. The SESA process includes six stages, namely,

Preparation for the SESA;

Collecting and analyzing baseline;

Scoping;

Developing alternatives;

Assessing the alternatives;

Developing management and monitoring plans.

The Six stages of the SESA process may have to be followed in an iterative manner. However, the SESA Task Team shall maintain all assessment activities systematically and consistently.

Preparation for the SESA;

Preparation works include finalizing the SESA ToR; securing the support from relevant government agencies and the National REDD+ Steering Committee; setting the objectives of the SESA; and identifying stakeholders and interested groups. During this stage, the SESA Task Force and SESA consultants should also be able to establish a basic understanding of the current situation regarding REDD+ policies/strategies in Ethiopia, their linkages with other relevant policies/regulations, as well as environmental and social development objectives.

Collecting and analyzing baseline data

Based on the understanding of the context, the consultants/firm will start collecting and analyzing the baseline information that is necessary to identify the relationship between REDD+ policies and land use; existing environmental and social issues related to REDD+ policies; policy and institutional gaps; and key stakeholders that are associated with these issues. This can be achieved by re-viewing all previous studies carried out or other sources identified by the SESA Task Team, including the study on the drivers of forest deforestation and degradation.

Scoping

The scoping process is to establish pertinent (key) issues for the next detail assessment i.e. SESA, identify relevant criteria for assessment, and conduct stake-holder analysis/mapping. At this stage, extensive consultations shall be held with key stakeholders and interested groups. A scoping report should be pre-pared to record these findings to inform the remaining stages of assessment.

Developing alternatives and proposing mitigation measures

With the input from scoping and adverse issues/risks identified, work at this stage will identify alternatives for the REDD+ policies/ strategies and proposing mitigation measures where alternatives may not be feasible.

Assessing the alternatives and mitigation measures

This stage will conduct scenario analysis for the alternatives identified. The purpose of the analysis of these possible options is to inform the formulation of REDD+ policies/strategies by identifying opportunities to enhance benefits for local communities. This will also involve summarizing the key challenges/gaps in implementing new REDD+ policies/strategies, and discussing possible trade-offs. The SESA Task Team will propose recommendations on the institutional capacity needed, formulation and implementation of REDD+ policies/strategies.

Developing management and monitoring plans

This stage will formulate an ESMF that will be implemented to follow up on the recommendations and issues/risks found from the preceding stages. By the end of this stage, the SESA process report, which includes the ESMF, will be formulated and consulted.

PART II. Terms of Reference of Environmental and Social Management Framework (ESMF)

Background

For all REDD+ activities, it will be important to ensure that potential negative environmental and social impacts are minimized, while striving to enhance benefits for local communities and the environment. The Environmental and Social Management Framework (ESMF) will help to provide a comprehensive framework on how to address potential adverse social and environmental impacts for future UNFCCC, FCPF and WB-financed REDD+ activities.

The ESMF will describe the risks and potential impacts associated with projects and activities and will include adequate safeguard measures.

While preparing the R-PP Assessment Note for Ethiopia, several World Bank (WB) safeguards were highlighted in the Integrated Safeguard Data Sheet (ISDS) to be triggered by the REDD+ activities in Ethiopia:

Environmental Assessment (OP/BP 4.01)
Natural Habitats (OP/BP 4.04)
Forests (OP/BP 4.36)
Pest Management (OP 4.09)
Physical Cultural Resources (OP/BP 4.11)
Involuntary Resettlement (OP/BP 4.12)
 OP/BP 4.10

2. PRINCIPLES AND OBJECTIVES

The ESMF supports an examination of the risks and potential impacts associated with one or more projects or activities that may occur in the future. The Framework sets out the principles, guidelines, and procedures to assess environmental and social risks, and proposes measures to reduce, mitigate, and/or offset potential adverse environmental and social impacts and enhance positive impacts and opportunities of said projects, activities, policies and /or regulations

The ESMF incorporates procedures for:

In-depth voluntary consultations with concerned stakeholder groups to seek their broad support;

culturally-appropriate capacity building measures;

Environmental and social impact screening, assessment, and monitoring; and

The inter-institutional arrangements for the preparation of time-bound action plans for mitigating adverse impacts.

ESMF will provide the overall framework for addressing social and environmental risk management issues in REDD+ activities that are implemented beyond the readiness preparatory work. The measures recommended by the ESMF apply to future REDD+ interventions financed by the World Bank as well as by the Government or other Donors willing to use World Bank safeguards.

3. Scope of the work

Task1. Development of an Environmental and Social Management Framework (ESMF), and a Resettlement Policy Framework

The consultants will use the information produced by the SESA to describe the potential risks and safeguard issues for future REDD+ investments. In particular, it will include a description of: Indicative REDD+ strategy option(s), its main social and environmental considerations, and the various risks involved in its implementation;

Legislative, regulatory, and policy regime (in relation to forest resources management, land use, indigenous rights, etc.) that the REDD+ strategy options will be implemented within;

Potential impacts, both positive and negative, deriving from future activities associated with the implementation of the emerging strategy, and the spatial distribution of these impacts;

Arrangements for implementing the specific activities.

Prepare a Resettlement Policy Framework to indicate how the cases of resettlement (including restriction of access to natural resources) should be dealt with. This should be a stand-alone document from the ESMF.

Task 2. An outline of capacity building actions for the entities responsible for implementing the ESMF

The consultants will present a Learning Plan that provides a detailed capacity-building strategy with measures to ensure that the ESMF can be effectively implemented. The consultants will recommend public and/or civil society institutions likely to conduct this capacity-building work and define the necessary budget. This capacity-building process could include institutional adjustments or procedures, recruitments or new assignments and training for national, local and regional institutional leaders and civil society organizations.

Task3. Required technical assistance

The consultants will identify required technical assistance by public- and private-sector institutions, communities, and service providers to support implementation of the ESMF.

Task 4. Outline of the budget for implementing the ESMF

The consultants shall provide estimated costs of the ESMF shall be evaluated for each measure recommended above. If there is no specific estimate, a methodology for estimating costs should be suggested. This estimate includes the needs for institutional improvement and training to apply the given safeguard measures. The consultants will present the ESMF in the form of measures incorporated directly into the REDD+ process activities (e.g., methodological improvements, supplements to recommended activities) so that it does not duplicate or overlap with the REDD+ process.

Task 5. Provisions for Monitoring and Evaluation

The consultant will design monitoring and evaluation system for the social and environmental impacts of the REDD+ process, with monitoring indicators and a corresponding evaluation procedures and methodology.

Task 6. Dispute resolution mechanism

The SESA process should identify key environmental and social risks that need to be addressed using a grievance mechanism that is accessible transparent, and culturally designed to consider local, and existing mechanisms in Ethiopia. A feedback and grievance redress mechanisms will be developed for REDD+ pro-gram in Ethiopia.

Task 7. Preparation of a final draft ESMF and the Resettlement Policy Framework

The final draft will have to be consistent with and contain specific sections addressing the requirements of applicable safeguard policies. These sections will draw on information generated by the SESA and will take the form of free-standing chapters within the ESMF that will resemble the frameworks provided for in the policies themselves, including:

Environmental Management Framework (EMF) to address any potential environmental impacts and necessary mitigation measures;

Process Framework (PF) for situations of restriction of access to natural resources within legally designated parks and protected areas, as required by the World Bank Involuntary Resettlement policy (OP 4.12); and

A stand-alone Resettlement Policy Framework (RPF) should be prepared to address any potential land acquisition and/or physical relocation and restriction to access to natural resources, as required by the World Bank Involuntary Resettlement policy (OP 4.12);

Public consultations on the ESMF and RFP will be integrated into the FCPF consultation processes in the country. Consultations should extend from the national level to the lowest level where site-specific projects and activities, if any, will be proposed, and implemented.

III. Schedule and Deliverables

The consultant will prepare a detailed work plan within two weeks of taking up the assignment. Summaries of the outputs of the various SESA tasks will be prepared to later be included in the SESA section of the R-Package.

Initial drafts of the ESMF will be submitted within four months after taking up the assignment. Final versions of the ESMF (including the „Learning Plan“ for capacity building) are expected within six months from contract signature. The two documents will include the outcomes from all the steps listed above. The presentation of the SESA and the ESMF will be complemented by annexes containing all supporting data, supplementary analyses, consultation reports with summaries of key issues identified, suggested mitigation measures, as well as lists of participants in specific activities.

Past Experience in conducting Environmental and Social Assessment in Ethiopia. Process/approach considerations

Building on from what exists

The Oromia Welfare state is already in the process of designing an Emissions Reductions program. The National REDD+ process, will heavily borrow, and learn from that process, as a pilot to inform the SESA process in the National program.

In addition to international best practices, there are also various examples with-in Ethiopia that will be used as starting point in creating a safeguards system for REDD+. The Federal Environmental Protection Authority (FEPA) has developed a set of environmental impact assessment guidelines which will be re-viewed to assess which aspects are relevant and can be adapted to a REDD+, SESA, ESMF.

The Government of Ethiopia and the donor partners of the, including the World Bank, have undertaken an Environmental Impact Assessment (EIA) on various projects and programs including the Humbo Natural Regeneration project, which is a CDM project. This included social aspects with the aim of generating lessons to build sustainable community assets. In addition to this there are various EIA and social impact studies from different projects which will also be re- viewed.

Of more direct relevance to REDD+ are a number of studies in the Bale Mountains on the feasibility of forest carbon activities. These studies included elements of social and environmental impact assessments and have been completed as part of a REDD+ pilot project development by the implementing NGO: Farm Africa/ SOS Sahel. This pilot project has carried out a legal due diligence report including information on the ownership of emission reductions. This NGO has also undertaken feasibility studies for the Bale REDD project for which they modeled household use of forests (e.g. biomass needs) so that a baseline for social impacts can be developed.

The Humbo project, run by the local community and mediated by World Vision Ethiopia and supported by the World Bank, and a grass land carbon sequestration project, ran by Save the Children US, both conducted various environmental and social feasibility assessments. This has generated many useful lessons not only in terms of the findings of the social and environmental impact assessments, but also with regards to designing and implementing appropriate mechanisms for impact assessment.

Annex 2: Sampled Sites and GPS Points

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
		Metemma	Lemlem Terara	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	Kelem Wollega	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
	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	

Region	Zone	Woreda	Kebele	Easting	Northing
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 3: Summary of Field Assessment of other Regions

Afar

Most communities in Afar region are pastoralists. Pastoralists travel with their herds of camel and livestock where there is fodder and grass. But now days, people are starting to establish permanent settlement. According to the participants, such permanent settlements of pastoralist communities encourage forest development initiatives in the region.

The livelihoods of the pastoralist communities in the region were severely affected by the widespread invasion of *Prosopis juliflora*. The invasion of *Prosopis juliflora* of the grazing lands has created shortage of grass for livestock which significantly reduced the livestock production in the region. On the other hand, some communities were benefited from charcoal trade in some woredas. In addition to the attempt to control *prosopis* through charcoal making, there is a *Prosopis* management initiative called Gewane Community-led *Prosopis* Management initiative working on physical eradication of *prosopis*. The *Prosopis* controlling initiatives like using the species for charcoal and other income generating schemes has significantly reduced the pressure on the existing natural forests and woodlands in the region.

Key informants mentioned that there are conflicts that occur in relation to grazing land uses especially when resources are scarce. They indicated that conflicts are resolved traditionally by the clan leaders. There is traditional institution called *Mada'aa* which owns woodlands, shrublands and grasslands of their respective areas. Woodland and grasslands in the Afar community belongs to the clan members and hence every member has the right to use the resources. Grazing lands are divided into grazing reserves (called *Deso* in Afar language) and open rangelands to rationally use it. The division of the grass land into *Deso* and open areas is to feed particular groups of the livestock on different types of the divided grasslands.

The region has rich mineral resources like salt, potash, sulfur, manganese, aluminum, marble, and gypsum which could be tapped as potential for non-forest job opportunity for forest dependent communities in the region. Although, the region also has tourist attraction sites such as the Awash National Park, Yangudi-Rasa Natural Reserve and the Dallol Depression do not benefit the community to the extent required and expected. There is very little Awareness on REDD+ by the local communities and the local administration. They iterated that if the REDD+ initiative imposes grazing restriction in the rangelands, it will be very difficult to implement it unless there is a viable and acceptable option for livestock grazing.

Amhara

Community consultation, Focus group discussions, key informant interviews and household interviews were carried out with experts and communities at regional level, in three selected Woredas namely, Tarmaber, Metema, and Banja Woredas and 6 Kebeles of Amhara Regional State. Consultations at regional and Woreda level were done with experts from environmental office, agricultural office, NGO, energy, religious leaders, and local elders. Kebeles which are located near the natural forest of the respective Woredas were identified and two Kebeles from

each woreda were selected for the survey. Group discussion (male and female groups) at the selected kebeles were done. In addition, interview with Kebele administrators, elders, key informants and three household interviews were made in each kebele. Gender and age category were considered for the consultations and group discussions made at all levels.

The region has both high land and low land types. The high land forest of the region is dominated by dry afro-montane forest characterized by *Juniperus procera*, *Podocarpus falcatus* and *Olea europae* whereas the low land part of the region is broad leaved deciduous woodland. The woodland forest include *Anogeissus leiocarpa*, *Boswellia papyrifera*, *Combretum collinum*, *Combretum molle*, *Dalbergia melanoxylon*, *Diospyros abyssinica*, *Ficus sycomorus*, *Ficus thonningii*, and *Gardenia ternifolia*.

The key informants at Tarmaber Woreda indicated that there are areas where the forest degradation level is high in the Woreda. However, the natural forest (*Wofwasha* Forest) is relatively in a better condition. On the other hand, the key informants at Metema had indicated that the forest in the area is at high risk due to high incidences of fire, encroachment of seasonal pastoralists from neighboring Woreda (Dembia, Chilga and far from other places) large scale agricultural investment for sesame and cotton farming and dwellers inside the forest expand their farm land. Moreover, the key informants and the discussants explained that *Boswellia Papyrifera*, a plant species used for frankincense extraction, is under severe threat because of technical inefficiency during tapping for the extraction of frankincense. *Dalbergia melanoxylon* is also said to be under threat as it is smuggled to Galabat (Sudan). Consultation results at Banja Woreda also indicated that forest degradation in the Woreda is high due to additional and new land demand for agricultural expansion.

To maintain the remaining forest and rehabilitate degraded areas, forest conservation initiatives such as PFM, NTFP cooperatives, were initiated in Tarmaber Woreda by the local NGO called SUNARMA. SUNARMA is working to transfer the existing forest practice to PFM practice for a better management of the resource. At Metema Woreda, ORDA (Organization for the Rehabilitation and Development of Amhara) has established PFM and all the PFM are planned to involve in alternative income generation activities. Some of the PFM groups already began the production of improved stove production (woman), poultry, goat and sheep rearing and ox fattening.

It is indicated that there are cases when conflicts occurred between forest guards and individuals while trying to use prohibited forest resources illegally but did not remember any conflict rose between community members or among the members of the community regarding the use of forest resources. On the contrary, key informants and focus group participants had mentioned that there were conflicts in Metema areas between the local communities and the pastoralists, locally called “*Mofer-Zemet*”, on the use of the forest resources. It is also reported in Metema areas that there were conflict between investors and local community when the former tried to expand their land without the consent of the community. The local administration mediates (plays arbitration role) in cases of similar incidents with investors and local communities.

Most of the conflicts were resolved through government intervention at different level. Communities had called for the long term resolution of the problem by government through obliging the investors not to obey the rules of the country and checking the movements of the community from other areas.

Finally, all the participants of the consultations and discussants at all level identified possible environmental and social benefits and risks of implementing REDD+ program and they also suggested the possible mitigation options to address the risks. These are already presented in the main report section.

Benishangul-Gumuz

The land cover of the region is identified as cultivation, grassland, shrub land, woodland and bamboo forest. Informants indicated that the region has the highest lowland bamboo (*Oxytenanthera abyssinica*) cover that occurs as extensive pure stands or as clumps in shrub land and woodland in the region. They also elicited that the lowlands have extensive areas of woodland and shrub land with high deforestation pressure from agricultural investment and presence of patches of shifting cultivation. In a number of areas, the original vegetation was cleared in the late 1970's for large scale resettlement, particularly around Pawe in the northern lowlands and around Asossa on the southern plateau. The key informant from the region mentioned that the region is endowed with different natural resources distributed in the zones of the region. Asossa Zone has the largest proportion of closed and open bamboo of the region compared to the other two Zones while Metekel Zone has the largest proportion of woodland and shrub land. Kamash is the second zone in terms of its forest coverage. The region's forest coverage is degrading at an alarming rate as a result of population pressure, investment (private and government mega projects-e.g. Renaissance dam), illegal settlement, and agricultural expansion. There are forest dependent communities in the region. The implementation of the forest proclamation in the region is mentioned weak. There is an attempt of coordination of the sectoral offices of the region but this is not a written and binding or enforcing the coordination. There are problems of structural arrangement for the forest related management and working on forest.

The population in the region largely depends on biomass for their energy needs which is one of the factors that put pressure on the existing forest coverage. Wide spread distributions of tse-tse fly the region largely affected the animal husbandry.

There is a concern that investment in the region doesn't follow the environmental requirements of the region as well as the country in general. Investment is one of the threats to the forest resource of the region.

Illegally occupying forest lands, clearing and cultivating are activities being practiced by individuals within the region or those coming from outside of the region.

Results of the key informants (KI) interview analyses indicated that the region's forest resource management practice through PFM approach is found as a good approach because the approach made the forest dependent community involved in the PFM process and gave the benefit accrued from the resource. The PFM believed will also boost the production of honey in the region. Experiences of the FARM Africa in the region can be used as a spring board for REDD+ to easily tackle challenges the former faced. It is suggested that REDD+ should begin its projects with self-mobilized community for the management of the resources.

The discussants in Assosa and Bambassi Woredas mentioned that the forest areas have not been managed and utilized properly and exposed to frequent fires. Land use change to agriculture is on the increase in both woredas. Bamboo forest encroachers in Assosa Woreda cut bamboo with no due regard to the maintenance of the stand. They further pointed out that forest fire is one of the prevalent problems, particularly in the dry season affecting the forest resource including the bamboo.

In most of the traditions cutting trees is indecent and is traditionally prohibited. However, it was mentioned by discussants that forest resources have been destroyed in the areas, especially in relation with the resettlement programs (e.g., in Pawe Woreda). The participants of the discussions agreed that wildlife and tree cover and other related resources were destroyed and exploited beyond the rate of natural regeneration.

It was mentioned that people draw their livelihood from freely available bamboo. Bamboo is everything for them and it is the only resource base for the Berta ethnic group. They stated explicitly that they have been using bamboo as the main livelihood for house construction, fencing, making tools for storage of crops, rope, making, fuel wood, household tools, and food. Bamboo is used to generate income for the community which the money is used for clothing, school fee coverage of their children medical fee. Local communities in the region always utilize the bamboo forest selectively and never exercise clear felling practice.

Gum and raisin tree species are dominantly found in the region which is creating income to the local community and if it is properly managed to generate more income and help to conserve the forest resource of the region.

REDD+ must work in creating awareness and provide chance for the local community to benefit from the existing natural forest and trigger how to promote forest friendly investment in the region. Partakers mentioned that if REDD+ wants to conserve the forest of the region, it should give emphases first on rescuing of existing forests in the region through integrated and participatory forest management system and also active engagement of the local community by equitable benefit share from the income generated from the forest resource. They believe that this helps to ensure sustainable forest management. Consulted experts explained that REDD+ needs to collaborate with existing initiative working on forest resource management of the region. The existing FRAM Africa forest related activities such as PFM , NTFP value chain that are carried out with the full participation of the forest dependent communities, will help REDD+ to achieve its goals through collaboration and experience sharing. The key informants further mentioned that REDD+ needs to respect and exploit the indigenous knowledge on conserving the natural forest.

Finally the partakers in both Woreda concluded that addressing use right, fire control mechanism and proper land use are the prim issue to implement and achieve REDD+ goals in the Woreda as well as in the region.

Gambella Region

The forest proclamation of the Gambella region is similar to that of the national with the only difference of inclusion of lists of few trees that exist in the region alone (like Loplop, Thow and Rir). At present, agricultural investments are becoming threat for the rare, threatened and endemic plants of the region. In order to conserve those trees and other wild plants of the region, the key informant and participants of consultations recommended a thorough identification of the species and deploying a conservation mechanism in the region. Gaps also identified on capacity of human resource and institutions to effectively implement the forest policy and laws in the region.

It was indicated that NGOs such as PACT Ethiopia introduced PFM in Godere Woreda but that were not successful due to the weak project exit strategy as reported by the participants. There is a fear that new attempt of PFM installation in the Woreda may be futile; hence, they suggested strong community involvement from the very beginning.

At present, Global Climate Change Alliance in Kabo kebele is working on conservation of forest resource. Participants of the consultations and key informants acknowledged the effort of Melka Mahiber to register the forest of the woreda as UNESCO Biosphere reserve.

In the region, trees that grow around grave yards of clan leaders are protected by all community members and do not allow to cut. Thus, similar practices can be scaled up to support conserve endemic rare and threatened plants. The region has no land use plan so far but currently working on the preparation of regional level land use plan with the federal government institutions (Ministry of agriculture, EWCA) and other stakeholders such as Horn of Africa Regional Environmental Center and Network (HoAREC&N).

Settlement has been practiced in the region since the Derg regime and woredas are still working on settling forest dweller communities in villages (e.g., the Messenger). The participants appreciated the settlement program as it helps to protect the forest. They also mentioned that resettlement in a village will enable them to access infrastructures like electricity, potable water in the future. Therefore, resettlement is considered as an opportunity that supports the forest development attempts in the region.

There were and are large numbers of refugees from South Sudan migrated and being migrating to the region. The migrants totally rely on the forest resources. They cleared forests to make shelters, get construction materials and fuel wood mentioned as the major cases of deforestation and forest degradation. Hence, it was suggested by participants that the government should consider resettlement of migrants and refugees to be carried out in non-forest areas and simultaneously supply them with alternatives for shelter and fuelwood uses.

There is no forest fire protection system in the region. Communities involve in suppressing forest fire whenever the incidences occurs. UNHCR has adopted a system of fire protection around the Refugee settlement areas within 10 km radius of the Refugee centers.

It is recommended that the following income generation options to be implemented in Gambella region:

1. The Shea tree *Wudo* (*Vitellaria paradoxa*) fruit is used to produce expensive ointment and detergent. Community cooperative establishment on the value addition and value chain will help as good income source to the community.
2. Farmers in Godere Woreda do not use inorganic fertilizer. Hence, market opportunity creation for the organic agricultural products will create opportunity that farmers will not move to the forest for additional land acquisition when what they owned exhausts of nutrient.
3. Develop and enhance the fishing business in Alwero Dam and Baro Rivers.

Somali Region

The Somali communities are highly structured and anchored in the system of clans, sub-clans, and sub-sub clans. The systems forms the basis of much of the core social institutions and norms of traditional Somali society, including personal identity, rights of access to local resources, customary law (*xeer*), and support systems. This traditional and cultural system is very important for the protection, management, and proper utilization of the natural resources including grazing lands.

In Somali region, small woodlands are administered by private household while large forests are administered by the clan leaders. The clan leaders and elderly people of the community make decision on the utilization, protection, and timing of grazing, browsing of grazing land, bush land or woodlands. It is indicated clan leaders/elders and community members began involving in joint planning of natural resource management. There are reported cases when conflict arose between communities on the use grazing land which traditional clan leaders, who are highly respected members of the Somali community, resolved the cases.

In Somali region, erratic rain fall and water scarcity are the major challenges the natural resource development has faced which this in turn will affect the implementation of the REDD+ projects. To overcome the water scarcity problem of the region, there is a traditional water harvesting practices known as *birkads*. This might be one entry strategy for the REDD+, supporting this local efforts and providing other possible alternatives to address the problem.

In a concluding remark, it was indicated that the social structure in Somali region is used for almost all social, cultural and resource management system. Any members of the community strongly respect the rules and regulations of the clan leaders. Thus, the clan system is very important for the protection, management, and proper utilization of the natural resources as well as implementation of the REDD+ projects.

SNNPR

Stakeholder consultations, focus group discussions, key informant and household interviews were carried out during the preparation of this report. Administrators, experts from governmental and non-governmental organizations, representatives of community members (i.e. community leaders, elders, religious leaders, women, minorities groups and youth) were invited and take parts at all levels.

During the Community consultation/ meetings various aspects of the REDD+ program, REDD+ strategic options to reduce deforestation and forest degradation, benefits and risks of implementing REDD+ strategic options as well as community related issues were discussed and the finding of the consultations were summarized as follows:

1. Both the key informants from the region and the selected Woredas results had indicated that the combined effects of population pressure, drought, migration and settlement from the other regions, large number of livestock, large scale agricultural investment and coffee plantation in the forest were identified as the major drivers of deforestation in the region.
2. According to the information obtained during focus group discussion and key informant interview, in most of the forest area of the region, the livelihoods of people are closely linked to the forests that provide a range of benefits for energy and construction materials, to grazing and sources of (edible fruits) foods. Moreover, the information indicated that the livelihoods of forest dependent communities rely on none - timber forest product (NTFP).
3. The Key informants from regional offices explained that all the above phenomena exerted pressure on the forest resources as result forest resource of the region is found at risk. To overcome these problems Participatory forest management (PFM) arrangements which engage local community on forest resources management and share the benefit from the forest with the government is increasingly gaining popularity and being adopted in the forest area of the region for the effective implementation of sustainable forest management by some development support organizations.
4. Key informants in Decha, Masha and Sheko Woredas further indicated that Participatory Forest Management (PFM) is implemented in 8, 9 and 12 Kebeles respectively by NABU, FARM Africa and German Environmental Organization (GEO), Wild Coffee Conservation (WCC) and Ethio-Wetland and Natural Resources Association. They help the conservation activities through awareness raising to the community, assist rehabilitation of degraded land and afforestation programs and supporting the PFM association in creating market link for some of the Non Timber Forest Products (NTFP) such as honey, *Piper capense* (*timiz* in Amharic), forest /wild coffee, cardamom and etc.
5. Discussion with regional and woreda agricultural office experts indicated that, the major perennial crops are *Coffea arabica*, *Mangifera indica*, *Persea americana*, *Citrus sinensis*, Enset and *Musa abyssinica*. Maize, teff, wheat, sorghum, pea and bean are some of the

- annual crops grown in the Woreda. They also discussed the usage of improved agricultural practices like fertilizer, improved seed, sowing in lines is implemented in the Woreda. The major problems encountered in using these inputs is the high cost of improved seed and fertilizers. There is also problem to accept and adapt to new technology by the community.
6. Information from focus group discussions in some of the Woredas (e.g. Sheko, Masha and Decha) showed that the major sources of conflict arose usually at the beginning of PFM implementation due to problems of benefit sharing mechanism/planning. Conflicts are usually solved through negotiation between community elders. They also suggested that equal sharing of forest resources will help conflict not to be arise over forest resources utilization.
 7. Focus group discussion with Menja community indicated that their live is so tied to the forest and any interference against the practice will disrupt the social system of the community. They acknowledged PFM is a good forest management practice and hoped REDD+ projects will also the same in valuing their attachments to the forest.
 8. Household interview from the selected Kebeles of the region shows that livelihoods of the SPNN Regional State is of diversified type. The most characteristic product of SNNPR is enset (*Ensete ventricosum*) which sometimes integrated into agroforestry practice, a food unique to Ethiopia. Coffee (both forest coffee and home garden as an agroforestry practice) is the most valuable income generating crop for most of the people of the region. On farm and forest sources spices are also important commodity for the livelihoods of the people of the region. Livestock, forest and petty trading are some of the activities which the people in the region earn their livelihoods.
 9. Finally, all the participants at all level identified all the possible environmental and social benefits and risks of implementing REDD+ program and they also suggest possible mitigation options to address the risks. These are already included in the relevant section of this SESA.

Tigray

Participatory Forest Management (PFM) is increasingly gaining popularity in some woredas of the region. PFM is initiated and implemented by SLM and GIZ in the region. Communities in some woredas are already benefiting from NTFP through harvesting high quality honey. Others are also extracting incense from the natural forests. For instance in Wolkait Woreda, 17 cooperatives produce about 2,000 ton of incense and generate 60,000,000 Birr per year. These cooperatives are playing significant role in conservation of degraded lands and forest protection.

There are activities in the woredas to maintain the existing forest resources as well as rehabilitate the deforested areas. Farmer managed natural regeneration which includes area closure is considered as typical strategy to encourage rehabilitation of degraded land. Afforestation /reforestation practices for construction and fuel wood production under the ownership of individual farmers and community has been mentioned as another strategy for the forest conservation initiatives. The deterioration of supplies from natural forests and the increasing

demand for wood products have encouraged farmers to grow fast-growing trees such as eucalypts in some woredas as woodlots.

In sloppy degraded lands, perennial grasses such as *Phalaris aquatica*, Rhodes, tree *Leucaena leucocephala* and *Sesbania sesban* were planted around and between terraced lands. Napier grass was introduced into irrigated sites. Cut and carry feeding system was introduced in all the intervened sites. The community set bylaws to protect forage development sites and was responsible for land preparation and planting.

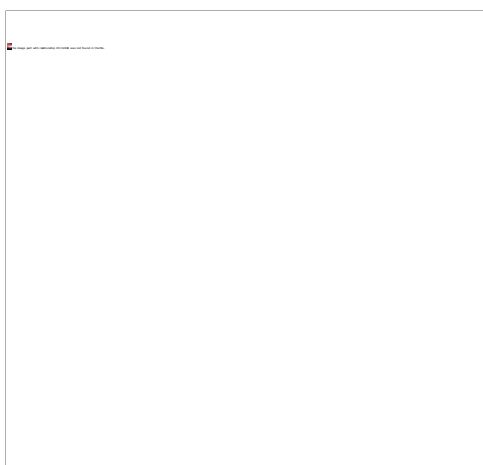
In the region, communities are engaged in watershed management interventions through biological and physical soil and water conservation works for 40 days of free labor a year for rehabilitation of natural resources, stabilize gullies, assist recharge of ground water, reforestation of upper catchment, reducing soil erosion and associated downstream siltation, regenerations of plant resources for increased agricultural productivity and improved biodiversity. Such community mobilization practices enables enhancement of forest resources.

Despite the fact and all the efforts made in managing the natural resource, there are some members of the communities who engaged in clearing forest for agriculture. In some of the Kebeles, it was observed in Wolkait Woreda that fire was used to clear the forest to make ready for cultivation. It is understood that the Region has no forest fire controlling system in case of incidence of it.

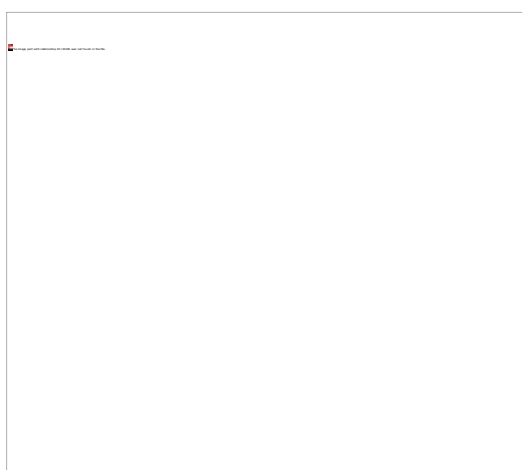
At the Woreda and Kebele levels, there are established conflict resolving committee composed of clan and religious leaders. The committee is active in Desa'a forest areas where there are conflicts between communities over the use of the forest resource. There has been a conference held to resolve such conflict with participants of being from Woreda of Afar and Wolkait woreda of the Tigray regions. In the conference, it is concluded that Tigray and Afar regional governments should make discussion to have clear border demarcation to resolve such problems permanently.

There is a demand for land by the communities in the region suggested to be acquired by sharing from those who have excess.

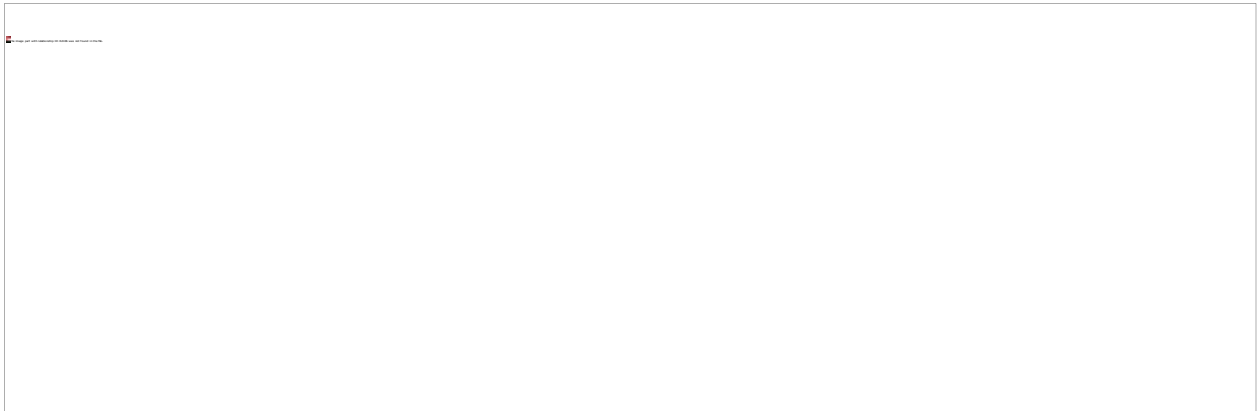
Sample photographs from the regions



Woreda Level Consultation (Sheko)



Woreda Level Consultation (Arbaminch)

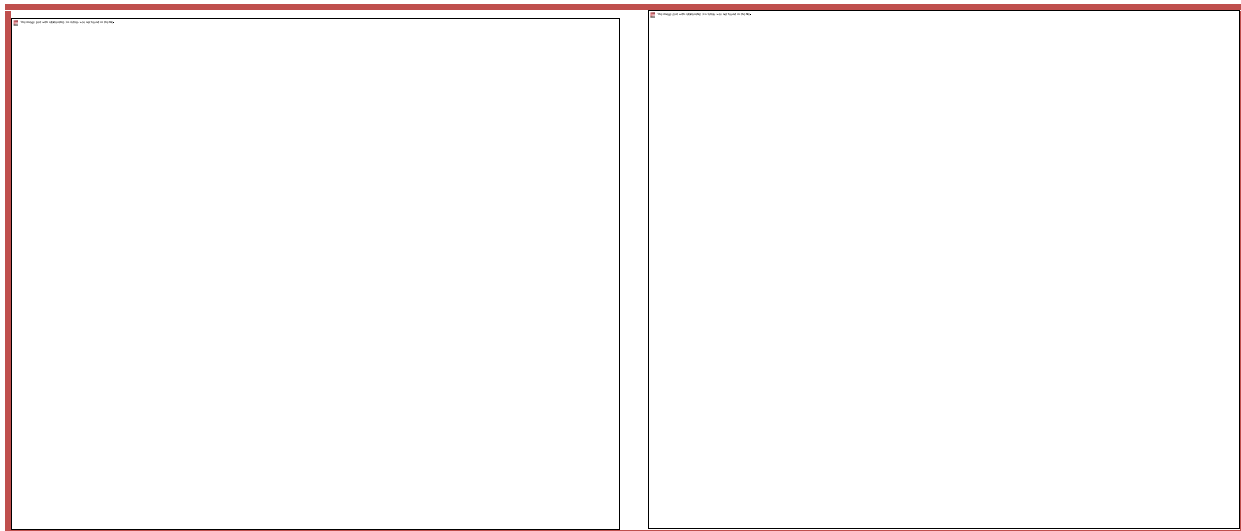


FGD with men group-Gambella

FGD with Women group-Gambella



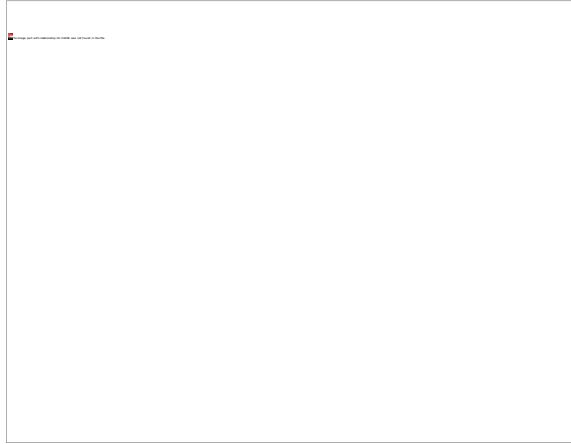
Key informat inerview-Gambella



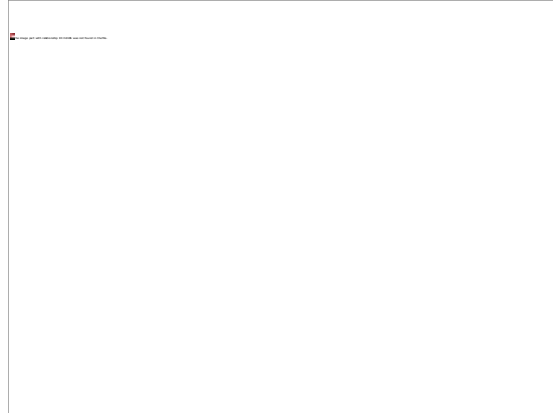
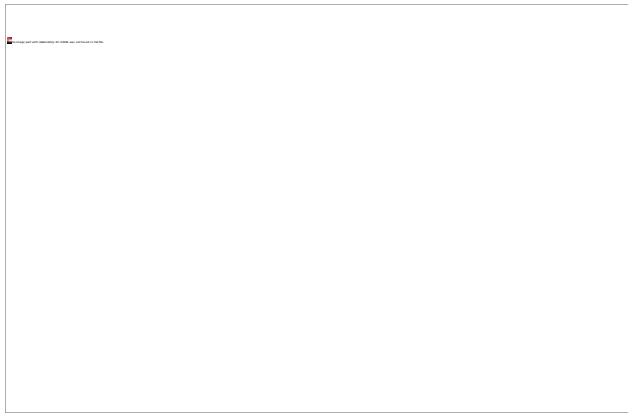
Forest land set in fire (left) and deforested (right) for cultivation in Tigray region



FGD with youth group-Gambella



FGD with women group-Gambella



Consultation in Benishangul-Gumuz(left) and Tigray (right)

Annex 4: Field Assessment Summary of Environmental and Social Issues by Regions

Region	Environmental situation	Social situation
Afar	<i>Prosopis juliflora</i> became a threat to the environment (displaced woodland and range land). Gewane Community-led <i>Prosopis</i> Management initiative launched to tackle the problem	Agricultural activity is very recent phenomenon. People are pastoralist
	Reported decline both in the livestock number and productivity due to <i>prosopis juliflora</i>	Livelihoods in the region report that it is under high pressure due to recurrent drought and famine, flash floods, disease outbreaks, bush encroachment, decline in livestock productivity, pastoral conflict, population growth. People mostly live on safety-net due to the problem in the region
	Deforestation and forest degradation is due to fuel wood collection, grazing and browsing, and illegal charcoal production	There is no road infrastructure to go through the shrub land and bushland
	No Conservation initiatives (PFM, NTFP)	90% of the Afar region is dominated by pastoralism as a way of life
	Afforestation/Reforestation Has focused on neem tree	Human settlement is determined by the availability of feed sources for the livestock
	No land use plan	No Community participation in the watershed management reported
	Traditionally, the grazing land is divided into grazing reserves (locally called-Deso) and open rangelands. Land management and ownership is by the clans of the community	woodland, shrub land and grassland are managed by traditional institution called Mada'aa
Amhara	Plantation is mainly composed of exotic species (<i>Eucalyptus</i> spp. and <i>Cupressus lusitanica</i>) and indigenous species (<i>Juniperus procera</i>)	Subsistence agriculture is the major livelihood of the rural community
	Community greatly mobilized for watershed management to rehabilitate degraded areas	There is no infrastructure inside the natural forest. Community initiated road and lodge constructions observed at Wof-Washa Forest

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Region	Environmental situation	Social situation
	PFM initiatives launched by a local NGO(SUNARMA) in the region (Wof-Washa Forest)	Community around the forest observed utilizing non-timber forest product (mainly honey) but no other forest products.
	Annual afforestation/reforestation carried out in the region by the Amhara Region Forest Enterprise, community and individuals.	Fuelwood is the main source of household energy
	Agricultural extensification was reported the main threat to forest in the region	Grievance between forest guards and community reported over the use of forest resources. Grievance redressed mostly in traditional way- <i>Shimgilina</i>
	Livestock grazing inside the forest is a common activity	There are traditional institutions such as <i>Edir, Kere, Shimgilina, Mahiber, Debo</i> , in different parts of the region
Benishangul Gumuz	The region has 80,557 ha natural high forest and 494,564 ha woodlands, shrubs and bamboo forest	The livelihood of the community is generally from traditional and undiversified source which mostly aim to meet daily needs and consist of traditional gold mining, sell of fuel wood, gathering wild honey, hunting, farming through slash and burn system.
	The natural resource degradation in the region is the result of state sponsored resettlement program (during Derg regime), investment, Sudanese migrants, encroaching highland neighbors, spontaneous immigrants, forest fire and absence of well-defined land use policy.	Forest is owned by government, private and community in the region.
Gambella	There is Participatory Forest Management introduced and run by FARM Africa	Animal husbandry is limited by Tse-tse fly
	Deforestation and forest degradation is found due to agricultural investment/expansion, refugee settlement from Sudan and South Sudan and forest fire. Shifting cultivation is practiced in the region and hence thought of affecting the forest situation. Livestock are causing forest degradation-pastoralists coming from neighbouring and other countries in search of grass and refuge in the harsh climate	The livelihood of the community depends on fishing, wild meat hunting, Shea butter tree utilization and organic farming.

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Region	Environmental situation	Social situation
Oromia	No PFM is experience so far in the region but an NGO (Mekaneyesus church) to launch at Godere forest	Household energy for the rural community is from fuelwood and charcoal
	No land use plan but Ministry of Agriculture began preparing it with HoAREC coordinating	
	Agricultural investments are converting forest lands into agricultural lands	
	There are PFM groups at different parts of the region (WAJIB, WaBuB, and others at Chilimo, Ilubabor, Gerjeda and other forests)	The livelihoods of the community in the region is so diversified. Agriculture, livestock and coffee are the main ones.
	Coffee plantation in the West, South and South East and Enset plantation in the South East parts of the forest of the region high affected the forest both in quantity and quality (deforestation and forest degradation)	Traditional grievance redressing mechanism is through Gadaa System- a system that developed well and used for hundreds of years. In case grievance occurs, the community opts for the traditional arbitration than government institutes such as court. Abbaa Lagaa/Abbaa Ollaa is the institution that serves the community as a traditional court.
	Mining in Shakiso (gold) and Illubabor (coal-under construction) have brought deforestation	Private forest exists in the region (West Wollega)
	The major problems observed in the region are, deforestation, soil erosion and siltation, forest fire, decline in land productivity, drying of rivers and springs and gully formation.	Limited participation of the community in conservation initiative such as participatory forest management due to no or little benefit from the resource
The main drivers of deforestation and forest degradation are fuelwood collection, high demand for construction materials, expansion of agricultural land, extraction of timber and charcoal making.	The communities in the region values forest most. They do not cut without replacement.	
Most of the forest of the country found in this region (about 70% of the forest of the country).	Communities in the region strongly claim that they are not benefitted from the resources they have been protecting for years.	

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Region	Environmental situation	Social situation
SPNNR	It is the second most forested region, after Oromia. Deforestation due to coffee and enset plating in the forest is found a serious problem the forest are facing in the region. Agricultural extensification was also found a threat to the forest	The livelihood of the community is based on coffee farming, agriculture and livestock husbandry. Enset (<i>Ensete ventricosum</i>) is an important food crop in the region. Spice production (from the forest and garden) as well as non-timber forest products support the livelihood of the community. Chat (<i>Catha edulis</i>) has been an increasingly planted product in recent years.
	NGOs (such as World Vision, FARM Africa/SOS Sahel Ethiopia, Ethio-Wtlands, Melka-Mahiber) were found collaborating with the government institutes to rehabilitate degraded areas	Peoples like Menja, Surma, Sheko, etc. are so much tied with the forest for their livelihood-called forest dependent community
Somali	The region is endowed with vast area of woodland forests. Deforestation in the region is due to charcoal making for local consumption and export to Somali Land. Commencement of small scale farming, high number of livestock and refugees living in the area threatened the woodland forest of the region. High sand invasion is also found a threat to the forest and the people as well.	It is the region that is most densely populated (more than 100 people per square) The livelihood of the community is dependent on livestock husbandry (pastoralist community). Charcoal making as a livelihood business is becoming an attractive business. Chat (<i>Catha edulis</i>) business is substantially support the livelihood of the people of the region
	Recurrent drought and shortage of rainfall characterize the region	With the irrigation scheme installation, people began cultivating crops and vegetables.
Tigray	Drivers of deforestation and degradation in the region is reported to come from high fuel wood consumption, illegal settlers came from the Welkait sugar project area, Illegal logging, absence of land use plan and land tenure system problem.	Huge market for livestock and their products but there is acute market problem. Livelihood depends on agriculture and animal husbandry income from the NTFP (mainly incense and honey) supports people living near and adjoining the forest areas.
	PFM organized with men and women participation in forest business (NTFP, i.e. incense) for income generation.	The 1991/92 GC (1994 EC) land redistribution in the region generously apportioned large size of land to the

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Region	Environmental situation	Social situation
		then few number of population. This has left now many people landless
	Afforestation/reforestation undertaken to rehabilitate deforested areas	Majority of the community depends on wood biomass for their house hold energy sources
	Environmental rehabilitation with area closure is a well know practice in the region	Grievance redressed through religious institution, youth and women affair and local peace and securitydesk.
	No report of deforestation due to road infrastructure	

Annex 5: Stakeholder Analysis Checklist

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Annex 6: Lists of Participants (partial)

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	"	"	
Agegnew 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	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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 Kechemba
Fikre Sarmiso	Female	-	"	"	"
Nigisti Nuguse	Female	-	"	"	"
Emesh Takele	Female	-	"	"	"
Tuse Lelamis	Male	-	"	"	"
Gosaye Tefera	Male	0949157733	"	"	"
Wondimu Goboro	Male	-	"	"	"
Sanbako Feyisa	Male	-	"	"	"
Lenidamo Leglamo	Male	-	"	"	"
Matiwos Fiche	Male	0911789288	"	"	"

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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	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
Asres Ademo	Male	0910157018	"	"	
Endale Keekamo	Male	0912686664	"	"	
Abuye Wodajo	Male	0917060153	"	"	
Yohanisi Alemu	Male	0937145308	"	"	
Melaku Mekuri	Male	0910829624	"	"	
Ayele Tefera	Male	0913629766	"	"	
Amina Hasen	Female	0917384684	"	"	
Zemzem Hasen	Female	0910156527	"	"	
Ayelech Mamo	Female	0931094303	"	"	
Almaz Bimirgni	Female	-	"	"	
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	-	"	"	"

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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	-	"	"	"
Felekech Mekonen	Female	-	"	"	"
Fikre Sisay	Male	0917383939	"	"	"
Tadese Wolde	Male	0917477323	"	"	"
Gezahgne W/Giorgis	Male	0917608271	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
Teshale Shiferaw	Male	0924119559	"	"	"
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	"	"	

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Yewbnesh Mamo	Female	0912446436	"	"	
Asnakech Kodo	Female	0910296234	"	"	
Mesay Kebede	Female	0910652676	"	"	
Zenebech Zeleke	Female	0917830222	"	"	
Achamyesh Ambcho	Female	0917111547	"	"	
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	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"	"	
Teshome Abraha	Male	0917310404	"	"	
Goji Kaisa	Male	0913821046	"	"	
Mengistu Mekonen	Male	0917328593	"	"	
Ali Shukralah	Male	0921214238	"	"	

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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	"	"	
Almnes Ejigu	Female	0917154225	"	"	
Aster Tsegaye	Female	0928255111	"	"	Giz Meret
Mulu Hasen	Female	0934788086	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	-	"	"	"
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	"	"	"
Aseggedech Abegaz	Female	-	"	"	"
Sisay Abera	Male	0911166077	Oromia	Anchar	
Yehualshet	Male	0922772424	"	"	
Mohammed Yuye	Male	0912782433	"	"	
Ababu Tasew	Male	0915242882	"	"	
Yeyis Takele	Male	0927866581	"	"	

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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	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
Tilahun Shimelis	Male	0970693458	"	"	
Musa Mohammed	Male	0921758998	"	"	
Ziad Ahmed	Male	0921184012	"	"	
Hamid Hawaso	Male	0923752177	"	"	
Abdurahman Kedir	Male	0937662476	"	"	
Yidnek Wondimu	Female	-	"	"	Dindin
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	-	"	"	"

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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	"	"	
Birhanu Wabe	Male	0915830419	"	"	
Bezabih W/Samayat	Male	0926509987	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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

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Muhammed Biftu	Male	0910821193	"	"	"
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	-	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	-	"	"	"
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	"	"	

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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	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"	"	"
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	"	"	"

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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 Ojulu Odolla	Male	0925850239	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
Didumo Oguol	Male	0923347847	"	"	"
Othow Obang	Male	0927548167	"	"	"
Othow Ochan	Male	0917834854	"	"	"
Will Otwelo	Female	-	"	"	"
Ajulu Uriaw	Female	-	"	"	"
Abenba Aliye	Female	-	"	"	"
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 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	"	"	

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Abebe Bekele	Male	0920943409	"	"	
Merga Geda	Male	0916841749	"	"	
Ramates Ulariyo	Male	0925661031	"	"	
Hussen Aliyu	Male	0932312131	"	"	
Kadir Adem	Male	0920381915	"	"	
Mohammed Hussen	Male	0919264464	"	"	
Ayenew Bekele	Male	0912451152	"	"	
Sufian Abdo	Male	0922758285	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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 Hussen	Male	-	"	"	"
Umer Buta	Male	-	"	"	"
Hussien Roba	Male	0924327520	"	"	"
Husseinh/Mohammed	Male	-	"	"	"
Getaneh Asefa	Male	-	Gambella	Godere	
Kedir Yesuf	Male	-	"	"	
Sahle Biza	Male	-	"	"	

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Tesfa Gefersu	Male	-	"	"	
Bekelech Tezera	Female	-	"	"	
Etagegnehu Chane	Female	-	"	"	
Bekelech Angelu	Female	-	"	"	
Mohamed Seid	Male	-	"	"	
Dejene Tarekegne	Male	-	"	"	
Tesfaye Abera	Male	-	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	-	"	"	"
Liya Markos	Female	-	"	"	"
Tobel Tekele	Male	0946511373	"	"	"
Enkasie 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	-	"	"	"

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Yadata Doba	Male	-	"	"	"
Fetene Bulcha	Male	-	"	"	"
Geremwe Nuru	Male	-	"	"	"
Firdi Kena	Male	-	"	"	"
Nuru Gebeyhu	Male	-	"	"	"
Adugna Gebeyhu	Male	-	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	-	"	"	"
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	"	"	"

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Meressa Geisa	Male	0917026616	"	"	"
Tesfaye Kebede	Male	0911756394	"	"	"
Tesfaye Yadesa	Male	0917025595	"	"	"
Fedesa Feyesa	Male	0912117086	"	"	"
Etenesh Abedeta	Youth	0932439106	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"	"	"
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	"	"	"

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Mohammed Amin Almacha	Youth	0940567883	"	"	"
Teshome Gezahegn	Male	0917108302	"	"	Gura Afalo
Al Nega Al Dura	Male	-	"	"	"
Abdulqadir Al Gidi	Male	0927571357	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
Birhanu Ayele	Male	-	"	"	"
Nasir Al Fogi	Male	0917616877	"	"	"
Sultan Al Fira	Male	0917913472	"	"	"
Yimam Ahimed	Male	-	"	"	"
Zinabu Katema	Male	-	"	"	"
Jihad Aldura	Male	0917244122	"	"	"
Altemam Alvaro	Male	0935117901	"	"	"
Algidi Algero	Male	-	"	"	"
Ahimed Alfita	Male	0910203768	"	"	"
Abeba G/Senbet	Female	-	"	"	"
Fatuma Alvaro	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	"	"	
Kebede Abdu	Male	0934256733	"	"	
Ebrahim Bazen	Male		"	"	
Asfaw Yebo	Male		"	"	
Birhanu Degafu	Male	0943211532	"	"	
Teka Zebenu	Male	0935174974	"	"	
Bayush Ashenafi	Female	0917340763	"	"	

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Tsehaynesh Gelane	Female	0912754907	"	"	
Zara Zewde	Male	0919441139	"	"	
Nayime Sherif	Male	0932029353	"	"	
Ayana Guddeta	Male	0941519856	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"	"	"
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	"	"	"

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Taju Kedir	Male	09310698	"	"	"
Dessalegn Befkadu	Male	0917276988	"	"	"
Birhanu Befkadu	Male	0917995787	"	"	"

Name	Sex	Mobile Number	Region	Wereda	Kebele
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		"	"	"
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 Tsehaye	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	"	"	"

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Tsegaye Tsehaye	Male	0914212581	"	"	
Alemu Anagaw	Male	0914391816	"	"	

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"	"	
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 ltey	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		"	"	"
Grmay Negusse	Male		"	"	"

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Name	Sex	Mobile Number	Region	Wereda	Kebele
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	"		
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	"		

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Name	Sex	Mobile Number	Region	Wereda	Kebele
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	
Hafte G/Wold	Male	0938-136938	"	"	
Tsegaye Tsehay	Male	0914-212581	"	"	
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	--	"	"	

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Name	Sex	Mobile Number	Region	Wereda	Kebele
Kasa solew	Male	--	"	"	
Berihun wekl	Male	--	"	"	
Tikuay abohoy	Male	--	"	"	
Fantu yabgew	Female	--	"	"	
Tadla tarecke	Male	--	"	"	
Yishak girmay	Male	--	"	"	Muge Tabia

Annex 7: Sample Attendance sheet from Decha Woreda Women FGD, SNNP Region



Form 1.2: Women Attendance sheet for SESA-ESMF

Date *L)j_ Z-1:--*

Name of Woreda *J2E;...ci10._____* Kebe le *-O---*

Agenda: *_F-j2s..ln&-f--diliL --QQ_..)k'fp_j--L -----*

Lists of Participants

No	Name	Mobile	Signature	Remark
2				<i>(l</i>
3			<i>7</i>	
4				
5				
6				
7				
8				
9				
10				
11				<i>t(</i>

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Annex 8: Sample Attendance sheet for Dodola Woreda Men FGD, Oromia Region



Form 1.2: Men Attendance sheet for SESA-ESMF

Date: _____

Name of Woreda: _____ Kebele: _____

Agenda: _____

Lists of Participants

No	Name	Mobile	Signature	Remark

Annex 9: Sample Attendance sheet from Decha Woreda Youth FGD, SNNP Region

[Empty box]

[Empty box]

Form 1.4: Youth Attendance Sheet for SESA-ESMF

Date: *ll J_gtll* ___

Name of Woreda *J)_E*----- Kebele *__ t* --

Agenda: *f-s.rf.J_ tOL-di.l.W_:Q_caf_f_U_l:S:J*-----

Lists of Participants

No	Name	Mobile	Signature	Remark
2				
3				
4				
5				
6				
7				
8				
9				
11				

Annex 10: Sample Attendance sheet from Arba-Minch Zuria Woreda Consultation, SNNP Region



Annex 11: Glossary

Afforestation: The act or process of establishing a forest especially on land not previously forested.

Agroforestry: A dynamic, ecologically based natural resource management practice that, through the integration of trees and other tall woody plants with agricultural plants on farms and in agricultural landscape, diversifies production for increased social, economic, and environmental benefits.

Benefit distribution system: A mechanism, which may be legally enforceable, which allows for the dispersal of benefits (financial or otherwise) derived from REDD+ project activities to stakeholders in these activities, i.e. to forest owners responsible for undertaking actions to reduce deforestation and forest degradation.

Benefit Sharing: The action of ensuring eligible stakeholders involved in REDD+ project implementation receive an equitable portion of the non-financial and/or financial benefits derived from REDD+ project activities.

Biodiversity: the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part.

Biofuel: Fuel produced from plants' biomass, seen as replacement for fossil fuel for transportation, which is known to be a major contributor to climate change; also known as agrofuel.

Carbon Credit: Part of the cap and trade carbon pricing system whereby an overall carbon emission cap is set and tradable allowances that grant businesses the right to emit a set amount of carbon are issued. Those who can reduce emission cheaply can sell their tradable allowance (carbon credit).

Carbon Trade: Carbon trading is a market approach to mitigate global warming that is leading to climate change by trading carbon credits.

Co-benefits: The non-carbon benefits arising from REDD+ policies and projects such as alleviating poverty, enhancing biodiversity, improving forest governance and protecting other environmental services.

Community Forestry: The governance and management of forest resources in designated areas or landscapes by communities for commercial and noncommercial purposes to further their own livelihoods and development. Community forestry incorporates the practice, arts, science, policies, institutions, and processes necessary to promote and support all aspects of sustainable community-based forest management.

Community-based Property Rights: The principles of land entitlement derived from and enforced by communities which often include. These rights can also encompass group-held rights to ancestral land and many traditionally used forest resources. They are not necessarily contingent on formal documentation or dependent on government creation and are seldom recognized by national or international laws.

Conservation: management of natural resources substantially as well as their protection and restoration.

Customary rights: Traditional entitlements, that are not always supported or recognized by national or international laws, which encompass forest resource use. They have evolved

and become established through community consensus on local usage patterns and gain authority and are enforced by locally acceptable institutions.

Declaration on the Rights of Indigenous Peoples: A UN General Assembly Declaration for the treatment of indigenous peoples which identifies key substantive and procedural collective rights to protect indigenous peoples from discrimination and marginalization. REDD+ programmes have an obligation to ensure that this Declaration is upheld throughout REDD+ implementation.

Deforestation: Clearing of forests, or intentional destruction or removal of trees and other vegetation for agricultural, commercial, housing, or firewood use without replanting (reforesting) and without allowing time for the forest to regenerate itself. Deforestation is one of the major factors contributing to the greenhouse effect and desertification.

Environment: Includes the surrounding living and nonliving things and their interactions.

Equity (law): The balanced and fair distribution of the costs and benefits of REDD+ projects and activities as well as the equal opportunity for participation of all stakeholders in the decision-making process throughout REDD+ implementation.

Forest Degradation: long-term changes within the forest which negatively affect the structure or function of the stand or site, and thereby lower the capacity to supply products (wood, biodiversity and other products) and/or services.

Forest Tenure: The right, whether defined in customary or legal terms, that determines who can hold and use forest lands and resources, for how long, and under what conditions.

Forest-dependent Communities: Communities that rely on forest resources for subsistence, medicine and livelihoods. Such communities are inextricably linked with the forest and its resources and are dependent on a healthy forest.

Free, Prior and Informed Consent: A key concept in the UN Declaration on the Rights of Indigenous Peoples. It refers to the obligation of outside entities to ensure that communities can grant or decline consent to a project or activity without coercion or intimidation, in advance of project planning or implementation and with access to all relevant information.

Governance Safeguards: Policies and measures that aim to ensure aspects of good governance in REDD+ implementation, such as transparency, genuine participation of all state and non-state institutions and actors and effective enforcement and compliance with laws.

Land Tenure: The set of laws and policies that determine locally how the land and its resources are accessed, who can hold and use its resources, and for how long and under what conditions they may be used.

Land Use, Land Use Change and Forests (LULUCF): Part of the Kyoto Protocol for land-use-based activities that have the potential of impacting carbon stocks and emissions.

Leakage: Any increase in GHG emissions occurring outside the project boundaries that result from project activities

Livelihood: The capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining its natural resource base.

Livelihoods: The ways in which people make a living. Livelihoods contribute to human well-being, which includes spiritual and aesthetic values.

Protected Area: The International Union of Conservation of Nature defines a protected area as “an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and/or natural and associated cultural resources and managed through legal or other effective means”.

Reafforestation: The reestablishment of forest cover, either naturally (by natural seeding, coppice, or root suckers) or artificially (by direct seeding or planting) where trees were used to grow.

REDD+: Reducing Emissions from Deforestation, forest Degradation, conservation of stocks, sustainable management and enhancement of forest carbon stocks.

Safeguard Information System: A tool or database that collects and/or provides country-level information on how safeguards are being addressed and respected by forest carbon projects.

SESA: A tool that uses a range of analytical and participatory approaches to integrate environmental and social considerations into policies, plans and programmes and evaluates the potential risks of REDD+ interventions and other mitigation options.

Social and Environmental Impact Assessment: The process of monitoring, analyzing and managing the intended and unintended social and environmental consequences of REDD+ projects and activities and any resulting social changes catalyzed by those interventions.

Stakeholders: The public, including individuals, groups or communities affected, or likely to be affected, by any proposed REDD+ project activity or actions leading to the implementation of an activity.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Traditional Knowledge: A concept that encompasses tangible and intangible creations, cultural manifestations, technologies, sciences, agricultural knowledge, designs, literatures, and visual and performance arts derived from oral and written traditions.

Traditional Ownership: Informal rights to access and use forest land and resources upheld and enforced through established social structures. These rights are not necessarily contingent on formal documentation and are seldom recognized by national or international laws.

Wildlife: All flora, fauna, and microorganisms existing in their natural state within a forest ecosystem.