



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

**Strategic Environmental and Social Assessment (SESA)  
For the Implementation of REDD+ in Ethiopia**



**Final Report**

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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
C&P	Consultation and Participation
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
ESO	Enhancements to Strategic Options
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
EBI	Ethiopia Biodiversity Institute
ICCO	Inter-Church Cooperation Organization
IGES	Institute for Global Environmental Studies
IK	Indigenous Knowledge
IPCC	Intergovernmental Panel on Climate Change
IPO	Implementing Partner Organizations
IT	Information Technology
IUCN	International Union for Conservation of Nature
JIE	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 Natural Resources
MoFEC	Ministry of Finance and Economic Cooperation
MoUDH	Ministry of Urban Development and Housing
MoWIE	Ministry of Water, Irrigation and Electricity
MRV	Monitoring Reporting and Verification
MW	Mega watts
NAMA	Nationally Appropriate Mitigation Action
NFF	National Forest Forum
NGOs	Non-Governmental Organizations
NPV	Net Present Value
NFPA	National Forest Priority Areas
NTFPs	Non-Timber Forest Products
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
R-PP	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 <sub>2</sub>	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. Background

Ethiopia has prepared a Climate Resilient 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 through its National REDD+<sup>1</sup> Readiness Program funded by a grant from the World Bank (USD 3.6 million) and a financial support (USD 10 million) by Norway and UK through the World Bank's BioCarbon Fund. This Strategic Environmental and Social Assessment (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 giving emphasis on social dimensions in Environmental Assessment, preparing integrated environmental and social impact assessment instruments (ESIAs) is very useful, which will be effected through the procedures and processes stated in the REDD Environmental and Social Management Framework (ESMF). This SESA also includes sections on vulnerability assessment, specifically focusing on impacts on underserved groups meeting OP4.10 requirements 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 the National REDD+ Strategy. To ensure the continuation of this process during implementation, a detailed national REDD+ consultation and participation plan has been prepared through engaging different stakeholders.

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. Few of the pilot REDD+ projects include the Bale Mountain Eco-region REDD+ Project (in Oromia), REDD+ Participatory forest management in South West Ethiopia (Masha, Anderacha, Gesha and Nono Sele), Yayu REDD+ Project, forest related CDM Projects (Sodo Zuria and Humbo), and Oromia Forested Landscape Program (OFLP).

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

## 2. Approaches and Methodology

The approach followed five stages of the SESA process:

### A. Preparation for the SESA:

- SESA/ESMF ToR was prepared by the national REDD+ Secretariat in collaboration with World Bank safeguard team
- Project was awarded in February 2015
- Negotiations and discussions were held with the client on the terms of deliverables (e.g., Process framework)
- Following discussions, the consulting firms reached a common understanding with the Client (REDD+ secretariat) on revised deliverable and added sites for Oromia region to accommodate the emphasis on OFLP.
- An inception workshop was held on 27 February 2015

### B. Scoping:

- Developing the criteria for site selection that took into account factors such as those areas identified as hot spot for Deforestation and Forest Degradation; potential for REDD+ projects implementation; leakage; forest cover; forest types; socio-economic settings; plantation sites and regional states. Based on the Criteria developed, 26 Woredas with two Kebeles from each Woreda were selected in eight Regional States (Afar, Amhara, Benishangul-Gumuz, Gambella, Oromia, SNNPR, Somalia and Tigray)

### C. Identification of relevant criteria for assessment to conduct stakeholder analysis and mapping.

- Checklist was prepared and shared with the client to identify potential stakeholders
- Stakeholder analysis was carried out

### D. Baseline data collection

- Developing the methodology for Secondary and Primary data collection
- The secondary data collection included reviewing Policy, Legal Frameworks (regional, national, international) and Other Relevant Documents including relevant natural resource related documents.
- Preparation of maps such as Land cover map and Biophysical characteristics maps including (forest area, geology, relief, climate, soil, elevation, soil, forest vegetation and key biodiversity areas using Spatial analyses methods
- The Primary Data collection was done by deploying different Participatory Rural Appraisal (PRA) tools such as consultations at Federal, Regional and Woreda levels, focus group discussions and key informant interviews. At the Federal, Regional, Woreda and Kebele levels, consultations and key informant interviews were carried out with key stakeholders and key informants respectively.

### E. Report preparation

- This SESA and three standalone reports (ESMF, PF and RPF) are prepared.

### 3. 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 96.6 million with average annual growth rate of 2.6% in 2014(CSA, 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 for arable land have a total area of about 40 million hectares.

As estimated by MEFC (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. Road network of Ethiopia is very low and government has launched recently 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).

The geologic and tectonic history of Ethiopia 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.

### 3.1. Forest related Environmental and Social Situations

Historical evidences show that 40 % of the land of Ethiopia was covered by forest in the 1900, then dropped to 3 % in 1980s and now unpublished sources indicate the cover has increased by substantial amount. 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.

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.

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 investments 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 key social issues of the forest sector in Ethiopia 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 to the forest and forest resources varies from region to region due to ecological conditions, socio-cultural values and economic factors Women and the youth find it easy way of fulfilling their financial needs. Hence, programs like REDD+ need to consider gender as a key social issue to be looked at across projects. Resource related conflicts (especially over land and water) in the lowlands and conflicts between local communities over claims in forest lands for cultivation and coffee planting are key social risks in the sector.

## 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 that were 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 use 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. Good examples are those of the agroforestry home garden tree management systems in the Gedeo community and the Borana Oromo tree management in the rangeland areas.

## **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 synopsis of the country's legal, policy and institutional frameworks including international conventions relevant to the REDD+ is presented below:

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, Forest and Climate change 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 by MEFCC)
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,
12. and Community Rights Proclamation, 2007 and the
13. 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 is reviewed.

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

This analysis 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.

		• Small-scale agriculture
		• Large-scale agriculture
		• Fuel wood extraction
		• Charcoal production
		• Logging (legal and illegal, Construction wood extraction

<b>Direct drivers</b>	<b>Anthropogenic</b>	• Forest coffee planting
		• Livestock grazing
		• Mining (small artesian and large scale industrial)
		• Roads and infrastructure
		• Invasive alien species
		• Fires/human caused
	<b>Natural</b>	• 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 bring tangible changes in curbing deforestation and forest degradation.

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

<b>Root factors</b>	<b>Underlying causes of deforestation and forest Degradation</b>
<b>Governance and Institutional</b>	<ul style="list-style-type: none"> <li>• Policy (land and forest)</li> <li>• Institutional structure</li> <li>• Law enforcement</li> <li>• Benefit sharing</li> <li>• Tenure and use rights</li> <li>• Corruption</li> <li>• Sectoral Synergy</li> <li>• Capacity</li> </ul>

## 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.

<b>Proposed strategic options</b>	<b>Suggested Enhancements to Strategic options</b>
SO1: Enhance cross-sectorial synergies and stakeholder participation	<p>ESO1: Support the establishment and implementation of the REDD+ coordination mechanism to ensure increased synergy and minimize sectorial and inter-regional divergence.</p> <p>Support the establishment and implementation of effective participation channels to ensure active participation of stakeholders</p>
SO2: Forest governance and law enforcement	<p>ESO2: Support the preparation of coherent law enforcement guidelines, adequate financing for forestry institution and strengthening of regional and local level governance structures through capacity building.</p>
SO3: Forest tenure and property right	<p>ESO3: support forest ownership and use rights certification for local communities by customizing land certification practiced in the country</p>
SO4: Land use planning	<p>ESO4: Support the preparation and implementation of national, regional and local level land use planning framework guideline.</p>
SO5: Ensure Sustainable Forest Management	<p>ESO5: Support afforestation and reforestation (A/R) on degraded lands, Promote the establishment and implementation of Participatory Forest Management (PFM) in forest areas including woodlands, protected areas and reserve forests and</p> <p>Support the placement of forest fire protection system with the participation of relevant stakeholders and communities.</p>

Proposed strategic options	Suggested Enhancements to Strategic options
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 (Agriculture yield increment, lower emitting techniques)	ESO7: Support the adoption of improved agricultural technologies (improved and high quality crops), increasing the use of fertilizer and green manure (biodegradable urban wastes can be used), and adopting agronomic best practices (e.g., harvest and post-harvest management). Furthermore, promote the actions to regulate the high rate of population growth.
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 Animal value-chain efficiency by improving cattle productivity, improved livestock management including improved breeds, value addition and marketing of livestock byproducts. Moreover, Promote the substitution of meat protein consumption with protein from poultry
SO11: Promote supplementary income generation	ESO11: Support sustainable livelihood or income generating activities for forest dependent communities including NTPFs and non-agricultural alternatives
SO12: Capacity building	N/A
SO13: Inter-sectoral coordination on planning and implementation	ESO13: See SO1 and ESO1
SO14: Demand-driven research and extension linkage	ESO14: Support research to enhance agricultural productivity, sustainable utilization of forest resource, participatory monitoring, technical options to improve ecological soundness of restoration initiatives, renewable energy technology adoption, landscape management approaches and alternative livelihoods options.
SO15: Ensure full participation and equitable benefit for women	ESO15: Ensure participatory and consultative process to establish a system that responds to both women and underserved groups
SO16: Benefit sharing	ESO16: Support the development of a benefit sharing mechanism where most of the benefits should reach to communities and smallholders that promote adoption of more sustainable land-uses, 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 is presented in the main text and the following are few examples provided in this summary.

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

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

<b>Environmental Risks</b>	<b>Mitigation measures</b>	<b>Social Risks</b>	<b>Mitigation measures</b>
<ul style="list-style-type: none"> <li>• Increased deforestation and forest degradation due to absence of inter-sectoral synergy</li> <li>• Forest land conversion to small and large scale agriculture may increase</li> <li>• Poorly quarantined agro-forestry species may become invasive and damage the natural environment;</li> <li>• Increased siltation of reservoirs; pollution from agro-chemicals may increase health risks</li> <li>• Increased use of energy efficient stove may indirectly lead to high biomass energy demand and consumption, which in turn cause deforestation</li> <li>• May be less effective in cases where mono culture practice more benefits the environment (e.g. in dissected landscapes)</li> <li>• 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)</li> <li>• Inadequate drainage and over-irrigation causes water logging</li> </ul>	<ul style="list-style-type: none"> <li>• Synergy and policy harmonization Coordination unit to be formed at the relevant level</li> <li>• Replacement planting required to compensate for the loss</li> <li>• Establish strong quarantine centers at national and regional levels</li> <li>• Implement watershed management practice to protect reservoirs</li> <li>• Provide other renewable alternate energy sources such as solar power utilization devices</li> <li>• Integrate several crops and tree species in the agro-forestry practices</li> <li>• Integrate in the agro-forestry system crops with low moisture demand</li> <li>• Harvest water during the rainy water for dearth period use</li> <li>• Fire break structure and equipment should be in place</li> <li>• Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops</li> <li>• Continuous leaching</li> </ul>	<ul style="list-style-type: none"> <li>• Increased forest products and NTFP prices; Inefficient social service from the sectoral offices due to lack of coordination</li> <li>• Attractive forest tenure and property right may increase competition for land</li> <li>• Small holder farmers may be evicted from their holdings for investment</li> <li>• Loss in land use right or ownership may be induced</li> <li>• Highly fragment land use may reduce productivity and cause food insecurity</li> <li>• Increases mineral fertilizer dependency and reduces the practice of use of natural products as fertilizer and pesticides</li> <li>• Incurs cost to the poor and local communities; difficult to adopt the technology in abundant forest resource areas</li> <li>• CSA sometimes need adopting new farming system and technology which may not be both accepted earlier and</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance synergy; facilitate for the creation of alternatives for the forest product and NTFP</li> <li>• Implement land use plan, effective law enforcement to deter competition for land at the regional and local level</li> <li>• Organize local community user groups through tested models (e.g., PFM, forest user associations), and grant clear use right over forest resources</li> <li>• Use compensation mechanisms and livelihood restorations both in kind and other means as per the RPF/PF</li> <li>• Increase productivity per unit area through improved input use (seed, fertilizer, etc.).</li> <li>• Integrate suitable agro- forestry species</li> <li>• Encourage agriculture intensification using organic fertilizers such as compost</li> <li>• Supply of energy efficient cooking and baking gadgets at subsidized price; avail electricity and solar devices at affordable price by the community</li> <li>• Government needs to</li> </ul>

<b><i>Environmental Risks</i></b>	<b><i>Mitigation measures</i></b>	<b><i>Social Risks</i></b>	<b><i>Mitigation measures</i></b>
<ul style="list-style-type: none"> <li>• Lowering of water tables</li> <li>• Water diversions for agriculture are a major problem for many aquatic species.</li> <li>• Solid wastes expected from poultry farm</li> <li>• Nuisance odor expected from poultry farm</li> <li>• Mechanization leads to intensive use of agricultural inputs that results in pollution</li> </ul>	<ul style="list-style-type: none"> <li>• of the farms with water</li> <li>• Irrigate the farms based on the soil water requirement analysis</li> <li>• Use drip irrigation to avoid both under and over irrigating</li> <li>• Implement practices that recharge ground water (watershed management, soil &amp; water conservation structure)</li> <li>• Diversion of water to only the threshold level beyond which aquatic live do not affected</li> <li>• Use the waste for fertilizing soil in farm land</li> <li>• Poultry farm to be performed far from the residential areas</li> <li>• Implement the EMP recommended in the ESIA of the project whenever available</li> <li>• Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any</li> </ul>	<ul style="list-style-type: none"> <li>• afforded financially respectively</li> <li>• Only rich farmers may benefit from CSA</li> <li>• Prevalence of water-borne diseases (giardia, schistosomiasis, etc.) may increase</li> <li>• Increased exposure to malaria</li> <li>• Shortage or lack of water resource to downstream users</li> <li>• Conflicts between neighboring communities over water resource utilization</li> </ul>	<ul style="list-style-type: none"> <li>• subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers</li> <li>• Educate and train community on the benefit of CSA</li> <li>• Educate and give sustainable training to the community on water and sanitation including water borne diseases</li> <li>• Enhance health facility for the treatment of water borne diseases if these are inevitably occurring</li> <li>• Avoid water logging through adequately draining</li> <li>• Disturb stagnant water continuously to break the breeding/life cycle of the insect</li> <li>• Cater mosquito net to the community</li> <li>• Implement wise and fair use of water</li> <li>• Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community</li> <li>• Harvest excessive water during the high moisture seasons for the later dearth period use;</li> <li>• Identify local and oversea markets for the products</li> </ul>

<i>Environmental Risks</i>	<i>Mitigation measures</i>	<i>Social Risks</i>	<i>Mitigation measures</i>
		<ul style="list-style-type: none"> <li>• Market problem of the products of livestock may be a challenge</li> <li>• Milk malnutrition especially to the kids</li> <li>• Bird diseases that is communicable to human may be a problem</li> <li>• Loss of assets (livestock) to be used for emergency case by selling</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain milk cows</li> <li>• Purchase and transport milk from surplus area</li> <li>• Sanitation to be maintained 24 hours a day, 7 days a week</li> <li>• Bio-safety measures to be taken</li> <li>• Educate farmers on saving of what is earned (from the main income generating or alternative income sources activities)</li> <li>Maintain few livestock to be used as an asset</li> </ul>

## 8. Observations and Recommendations

### 8.1. General

- The REDD+ program has full package of the right instruments (technical and institutional interventions, management arrangements, benefit sharing) to address the prevailing social and environmental problems entangling the forest sector in Ethiopia. It is an appropriate approach and 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.
- 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.

## **8.2. Environmental 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 administrations have no resources to carry out meaning corrective actions at the local level.
- The revised 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 revised forest definition (2014) 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.

## **8.3 Social 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., Participatory Forest Management (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).

### **Recommendation**

- The benefit sharing mechanisms in those existing forest management initiatives should be piloted before scaling up to increase the chances of designing a better benefit sharing mechanism for REDD+ implementation.
- Development opportunities accruing from the REDD interventions should benefit both women and men equally.
- The national REDD+ anticipated social impacts have triggered World Bank OP/BP 4.12 and OP/BP 4.10, and the national REDD+ 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 to protected areas, 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 National REDD+ 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 national REDD+ strategy

### **8.4. 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 in the development of the sector.
- 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), 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 MEFCO 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 has disclosed that the guideline has essentially missed concepts on REDD+. It is highly recommended that the draft ESIA need to include concepts of REDD+. Forests to be put under REDD+ can be defined and characterized and provisions on impact assessment of such forests can be included.
- The revised forest definition has shortcoming that might instigate further deforestation in one particular vegetation type. The revised 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 exotic species. Therefore, 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.
- 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 MEFCO) 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. 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 MEFCO 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 later after implementing the REDD+ projects.
- 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 MEFCO 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 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.

# 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 no harm” society and the environment while trying to “do good” and 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), 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, and the study for deforestation and forest degradation for the Bale REDD+.

## 1.2 Objectives of the SESA

The general objective of 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 that 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.

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 Brief 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.

*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.

*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.

*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.

*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.

*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.

*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.

*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.

*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.

*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.

*December 2014:* COP 20 was in done 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.

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

In recent years, REDD+ policy seems to have been embedded within the wider CRGE strategy, which works together with the GTP. The GTP reflects the government's ambition to lift the country to middle income status by 2025. 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 Hoggbeg 2000; Demel Teketay 2001; Darbyshire et al. 2003). Agricultural expansion since the third and fourth millennium BC resulted in extensive deforestation and forest degradation in the northern highlands of Tigray and 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.

#### **Direct Drivers:**

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

#### **Underlying/Indirect Drivers**

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

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

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

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

In Ethiopia, recent studies indicated that the main drivers and agents of deforestation and forest degradation are categorized into three (i) Nature in combination with human actions; (ii) Agriculture; (iii) Forestry; and (iv) Livestock described as shown below.

### **Agriculture**

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

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

### **Forestry**

**Increased wood extraction for fuel and construction purposes:** as stated in the energy policy of Ethiopia (Energy Policy of Ethiopia, 2006), the largest share of energy source is biomass, covering 94 %. This includes fuel wood, charcoal, branches, leaves and twigs. In addition, the demand for construction wood has been increasing and extraction from the natural forests has increased. This is partly due to the erosion of customary forest management practices and

replacement of user rights with state defined formal laws/use rights, which are not properly implemented.

### **Livestock**

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

### **Underlying D-DD**

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

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

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

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

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

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

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

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

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

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

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

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

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

while commercial agriculture expansion is affecting high woodlands, and fuelwood collection and livestock are affecting lowland woodlands.

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

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

Forest ecosystems	Drivers	Impacts	Agents
High Forests	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
<b>Sectors/commodity types</b>			
Energy/Biomass		Deforestation / Degradation	Small-holder farmers and fuel wood sellers
Livestock grazing/dairy and meat		Degradation	Commercial and small-scale farmers
Wood industry/Unsustainable timber extraction		Deforestation / Degradation	Commercial enterprises, communities and households
Investment/Coffee		Degradation	Commercial and small-scale
Agriculture supply chains/Khat, Sesame, maize,		Deforestation	Commercial and small-scale

Source: Adapted from OFWE (2014)

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

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

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

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

Description	Direct driver/activity	Agents	Significance/threat level	
			Forests	Woodlands
Deforestation	Small-scale agriculture (cereals and pulses)	Farmers (smallholders)	High	Medium
	Small-scale agriculture (perennials and coffee)	Farmers (smallholders)	High	Low
	Commercial agriculture	Investors (foreign direct investment)	Medium	High
		Investors (local)	High	High
Degradation	Fuelwood	Collectors and producers	High	High
	Grazing	Local farmers	High	Medium
	Forest fire	Nature/squatters	Medium	High

Source: Melaku Bekele et al. (2015)

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

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

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

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

Source: MEFCC, 2015

## 2.5 Review of REDD+ Strategy Options for Ethiopia

The R-PP presented a review of the current strategies in different development programs that are targeted directly or indirectly to address deforestation and forest degradation within the existing legal and policy framework (FDRE, 2011) as shown in Box 1 below.

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

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.

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

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

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.

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

- Clarify, reinforce and support local people's right: REDD+ will support PFM and the various community institutions set up within PFM. There are different locally practiced community institutions under PFM jurisdiction such as “Shemiglina” and “Qobbo” (see Subsection 4.2 for further information) used to resolve conflict at local level. To use these local institutions in REDD+ process, REDD+ will strengthen and use them to address conflict which may arise in forest resource management.
- 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.

<b>Box 4. Main strategic options in the Bale-Eco-region REDD+ intervention</b>	
<ul style="list-style-type: none"> <li>• Agricultural intensification and provision of economic alternatives</li> <li>• Provision of fuel efficient technology and alternative supply of wood for fuel and construction materials from non-forest lands</li> <li>• Implementation of sustainable forest management, conservation and Protection and support for effective law enforcement</li> <li>• Institutional Capacity building for government and JFM community, PFM Cooperatives and OFWE</li> <li>• Development and Implementation of Bale Mountains Eco-region Fund</li> </ul>	

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

<b>Box 5. Strategic options for the Oromia Forested Landscape Program</b>			
<b>Primary Causes of Deforestation in Oromia</b>		<b>OFLP Interventions</b>	<b>Source of Funding</b>
<b>Primary Direct Causes</b>	Small-scale agriculture expansion	<ul style="list-style-type: none"> <li>▪ Forest management investment in deforestation hotspots, including the promotion of PFM</li> <li>▪ Strengthening extension services on forest management, smallholder agriculture, soil and water conservation, and household energy</li> <li>▪ Coordination with several other initiatives in Oromia promoting more resilient and productive agricultural and land management techniques</li> </ul>	<ul style="list-style-type: none"> <li>▪ OFLP grant</li> <li>▪ OFLP grant</li> <li>▪ GoE and development partners funding relevant initiatives (such as the SLMP, PSNP and AGP)</li> </ul>
	Wood extraction for firewood and charcoal	<ul style="list-style-type: none"> <li>▪ Forest management investment, including A/R for biomass energy (woodlots)</li> <li>▪ Coordination with the national cook stoves and the biogas programs to mitigate biomass demand (see below for incentives, enhancements, and policy)</li> </ul>	<ul style="list-style-type: none"> <li>▪ OFLP grant</li> <li>▪ GoE</li> </ul>

<b>Box 5. Strategic options for the Oromia Forested Landscape Program</b>			
<b>Primary Causes of Deforestation in Oromia</b>		<b>OFLP Interventions</b>	<b>Source of Funding</b>
<b>Primary Indirect Causes</b>	Inadequate land-use planning and enforcement at micro level	<ul style="list-style-type: none"> <li>▪ Land-use planning support at the woreda and community levels</li> <li>▪ Further coordination to promote smallholder land certification</li> </ul>	<ul style="list-style-type: none"> <li>▪ OFLP grant</li> <li>▪ GoE land-use planning initiative</li> <li>▪ SLMP (MoANRD/BoA)</li> <li>▪ DFID (LIFT)</li> </ul>
	Inadequate cross-sectoral policy and investment coordination	<ul style="list-style-type: none"> <li>▪ State-level activities to promote cross-sectoral coordination, including the establishment of the Oromia REDD+ Steering Committee (ORSC) chaired by the Oromia bureau head and of the Oromia REDD+ Coordination Unit(ORCU)</li> <li>▪ Policy development and enforcement (harmonized PFM rules, forest and land certification, incentives for the adoption of renewable energy sources, and so on)</li> <li>▪ Improvement of incentives (marketing of cook stoves, preparation of BSM for ER payments, small natural-resource-based enterprise operating environment)</li> <li>▪ Local-level activities to coordinate and leverage existing initiatives to protect and expand forest cover and improve land use</li> <li>▪ Information enhancements such as the MRV system, Forest Management Information System (MIS), and strategic communication</li> </ul>	<ul style="list-style-type: none"> <li>▪ OFLP grant</li> <li>▪ GoE</li> <li>▪ GoE and development partners funding REDD-relevant initiatives (such as the SLMP, PSNP, and AGP)</li> </ul>

Source: Draft OFLP program appraisal document (February, 2016)

In the program appraisal document of the OFLP, the prioritized strategic programs are focused on local level activities (land use planning support and extension activities support), state level activities (institutions, incentives, safeguards information and management) and emissions reductions (strengthening MRV). The local level activities are focused on Afforestation and Reforestation, and livelihoods whereas the state level activities are focused on strengthening institutional capacity, incentive mechanisms and safeguards management.

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.

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

Source: Draft National REDD + Strategy (2015)

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

## 2.6 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 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 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, Forest and Climate Change 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 FREL/FRL and MRV system and preparation of M & E framework. The implementation of the R-PP covers the period of 2013-2018 (Figure 1).

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.*

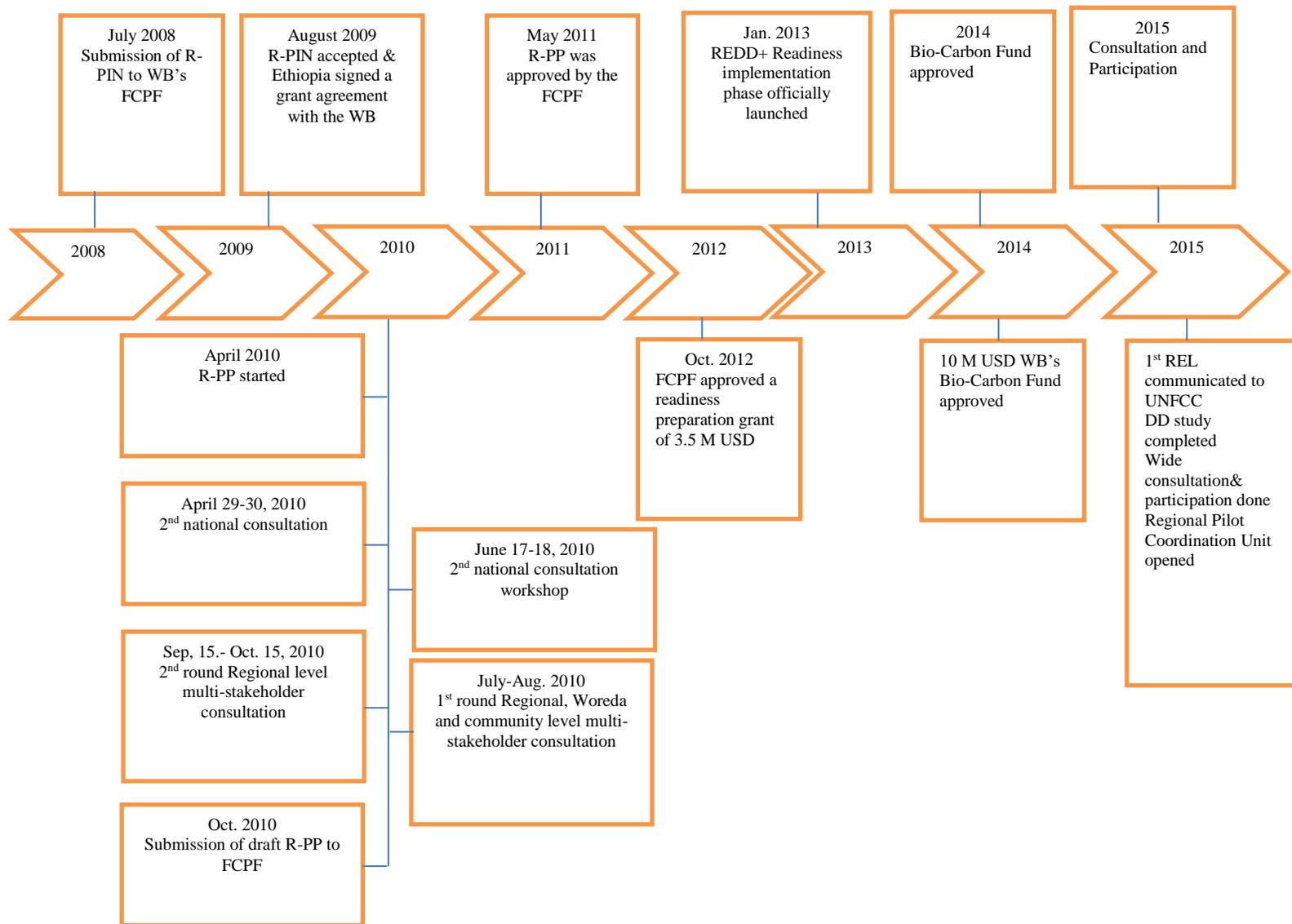


Figure 1: Ethiopia's REDD+ Readiness Process under FCPF

## 2.7 REDD+ Management Arrangement

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

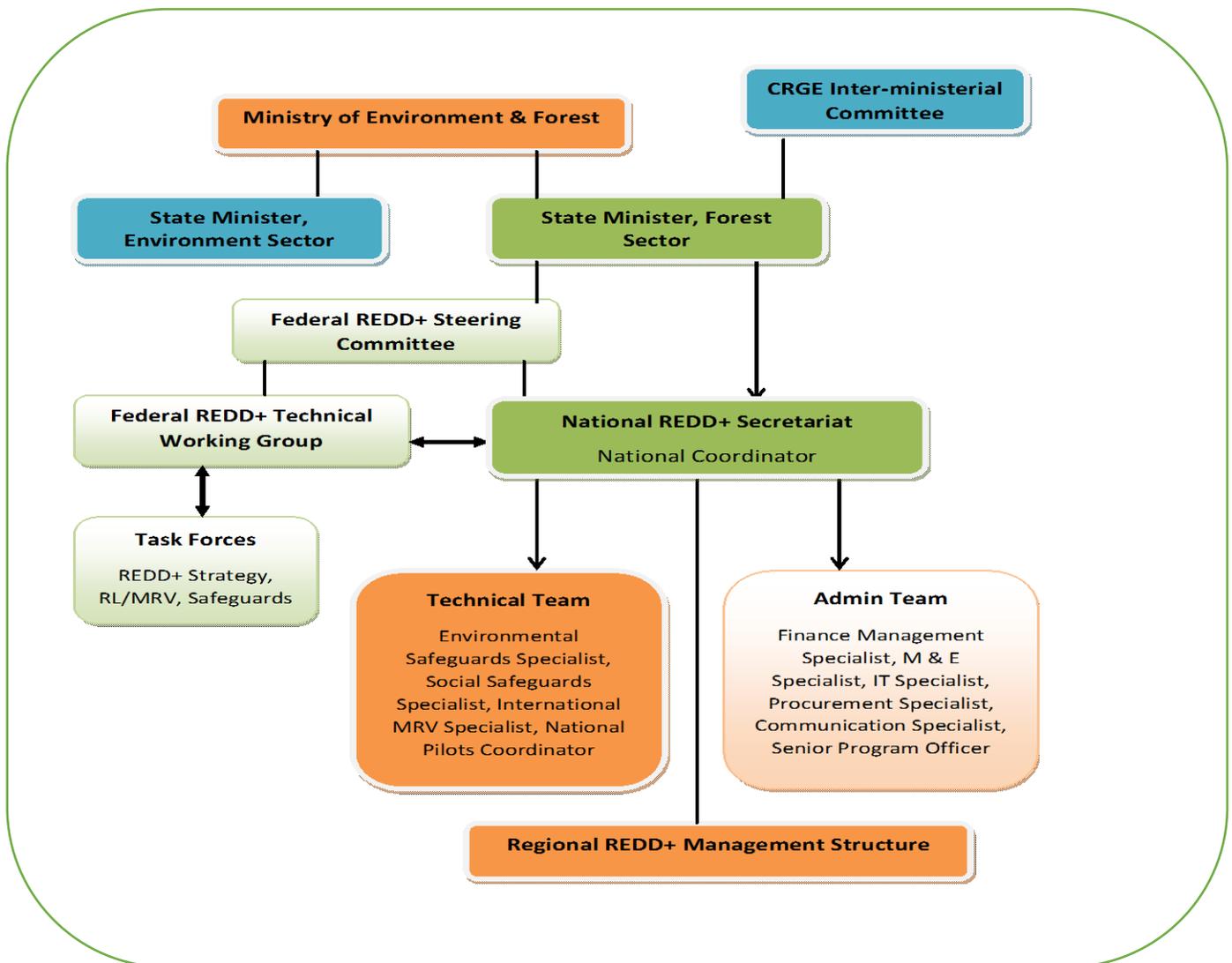


Figure 2: National REDD+ Management Arrangement

## Consultation and Participation

The Cancun safeguards aim not only to mitigate the risk of adverse social and environmental impacts of REDD+ activities, **but also to actively promote benefits beyond carbon emission reductions**, such as respect for the rights of local communities, enhancing biodiversity, improving forest governance and empowering relevant stakeholders by ensuring their full and effective participation. The WB OP/BP 4.10 is consistent with the Cancun Decision 1/CP.16, in particular its emphasis on respect for the knowledge and rights of Indigenous Peoples and on their full and effective participation. The process of consultation and participation is central to the effective implementation of REDD+ readiness. For full and effective participation of local community and relevant stakeholders, REDD+ participant countries required to prepare a detailed Consultation and participation plan. Based on this fact ***a detailed separate national REDD+ Consultation and Participation Plan has been prepared and considered as part of national safeguards instruments. This Plan primarily complies with the World Bank Operational Policy (OP/BP 4.10) requirements as well.*** This Plan will also provide a framework that ensures ownership, transparency, and inclusiveness of effective and informed consultation and participation by relevant stakeholders in the process of implementing the R-PP. Further, the complex and dynamic consultation process at the national level will be complemented by Awareness and Communications strategy, and a Grievances Management Guideline both of which are about to be finalized. Awareness creation activities have been going on since January 2013 using different communication channels, including workshops, SMS messages, brochures, TV and Radio message.

## 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.

## National Forest Inventory, Reference Level and MRV system

Ethiopia is now designing and implementing 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.

## 2.8 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 degradation and prioritizing strategic options. Additional technical studies were taken up by a consortium of consulting firms to determine the reference level (RL) and emission factors (EF). A series of consultations were carried out between 2010 and 2012 involving a range of stakeholders; local communities, local and regional level government offices, Community Based Organizations, and non-government organizations. The consultation process was conducted in accordance to the Cancun social and environmental safeguard elements where stakeholders at all level were consulted following the free, prior, informed, consent (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 6 components of the bigger Bale Eco-region Sustainable Management Project (BERSMP), much of the community organizations are built on the experience of the previous PFM activities. The design phase also involved the preparation of manuals for carbon stock determination and different capacity building activities for experts, community members and other stakeholders. It is the first REDD+ project in Ethiopia registered under the Voluntary Carbon Standard (VM0015) and a Project Design Document (PDD) is finalized and project validation and registration is near to completion.

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

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

**Yayu REDD+ Project:** The project is jointly initiated in 2012 by a consortium of NGO's, the Environment and Coffee Forest Forum, Horn of Africa Regional Environment Center & Network and Inter-Church Cooperation Organization (ICCO). The project aims to avoid **deforestation and forest degradation plus promoting carbon stocks conservation and enhancement (REDD+), coffee genes and forest biodiversity conservation and poverty reduction through the creation and implementation of conservation areas through the strengthening** of OFWE and community based organizations in Illubabor Zone in Oromia National Regional State, Ethiopia. The project area covers a total of 168,610 ha. Based on the feasibility study, average annual deforestation is estimated as 1.2% and the number of project beneficiaries is estimated at 150,000 households. Moreover, the project is expected to generate a total of 16,637,271 tCO<sub>2</sub> over 20 years.

**Oromia Forested Landscape REDD+ Program** is an integrated landscape approach that combines sector-based investments with cross-cutting policy reforms within the jurisdiction of the Oromia Regional State. This is a national pilot implemented by OFWE and MEFCO with a financial support from Norway for the design and emission reduction phase and the World Bank

provides technical support and a mobilization grant which covers the implementation cost. The program was initiated in May 2013 and since then a number of design elements were developed. A number of technical studies including drivers of deforestation and degradation, legal and institutional arrangement for REDD+ implementation, developing reference levels and consultation and participation plan are finalized. A project implementation manual (PIM) is currently under preparation. The OFLP implementation will put in place enabling environment (policy, law and institutions) across the regional state and local level interventions in **47 forested Woredas** (deforestation hot spots) with limited on-ground intervention in the remaining forested landscapes in the region. Local level activities include land use planning, extension services and forest management investments (PFM and Afforestation/Reforestation) in the 47 hotspot **Woredas** while ensuring effective coordination with World Bank financed on-ground projects like SLMP and AGP within the region. A safeguards assessment is currently undergoing which will identify the social and environmental impacts of project implementation and designing a management framework to mitigate the negative impacts.

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

Table 3: 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	OFWE
REDD+ Participatory Forest Management in South-West Ethiopia	SNNPR	Project level	>240,000	Initiated	SNNPR and OFWE
Yayu REDD+ Project	Oromia	Project level	190,000	Initiated	OFWE
Oromia Forested Landscape REDD+ Program*	Oromia	Jurisdictional	8.7 million*	Design phase completed	OFWE

\* OFLP considers all forests in Oromia region. This figure is provided in the current ESMF report of OFLP (2015).

## 2.9 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 tCO<sub>2</sub> (35 years crediting period) is certified in accordance with the Gold Standard. First round 50,000 tCO<sub>2</sub> 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 tCO<sub>2</sub> with total revenue of USD 3,961,328– the equivalent of USD 4.5/ton (Humbo AR-CDM PDD 2009).

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

## **3. Approach & 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

##### **3.1.1.1 Preparation for the SESA**

SESA/ESMF ToR was prepared by national REDD+ Secretariat in collaboration with World Bank safeguard team. 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. Project 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.

##### **3.1.1.2 Scoping**

The stakeholder analysis and the inception process constitute 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 consultant 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 (MEFCC). 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 consultant 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 by the team of experts.

### **3.1.1.3 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.

### **3.1.1.4 Collecting and Analyzing Baseline Data**

Based on understandings of the context, the consultant firm 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 by the consultant, including the study on the drivers of forest deforestation and forest degradation.

### **3.1.1.5 Report Writing and Submission**

Writing of the SESA report and accompanying standalone reports of the ESMF, RPF and PF.

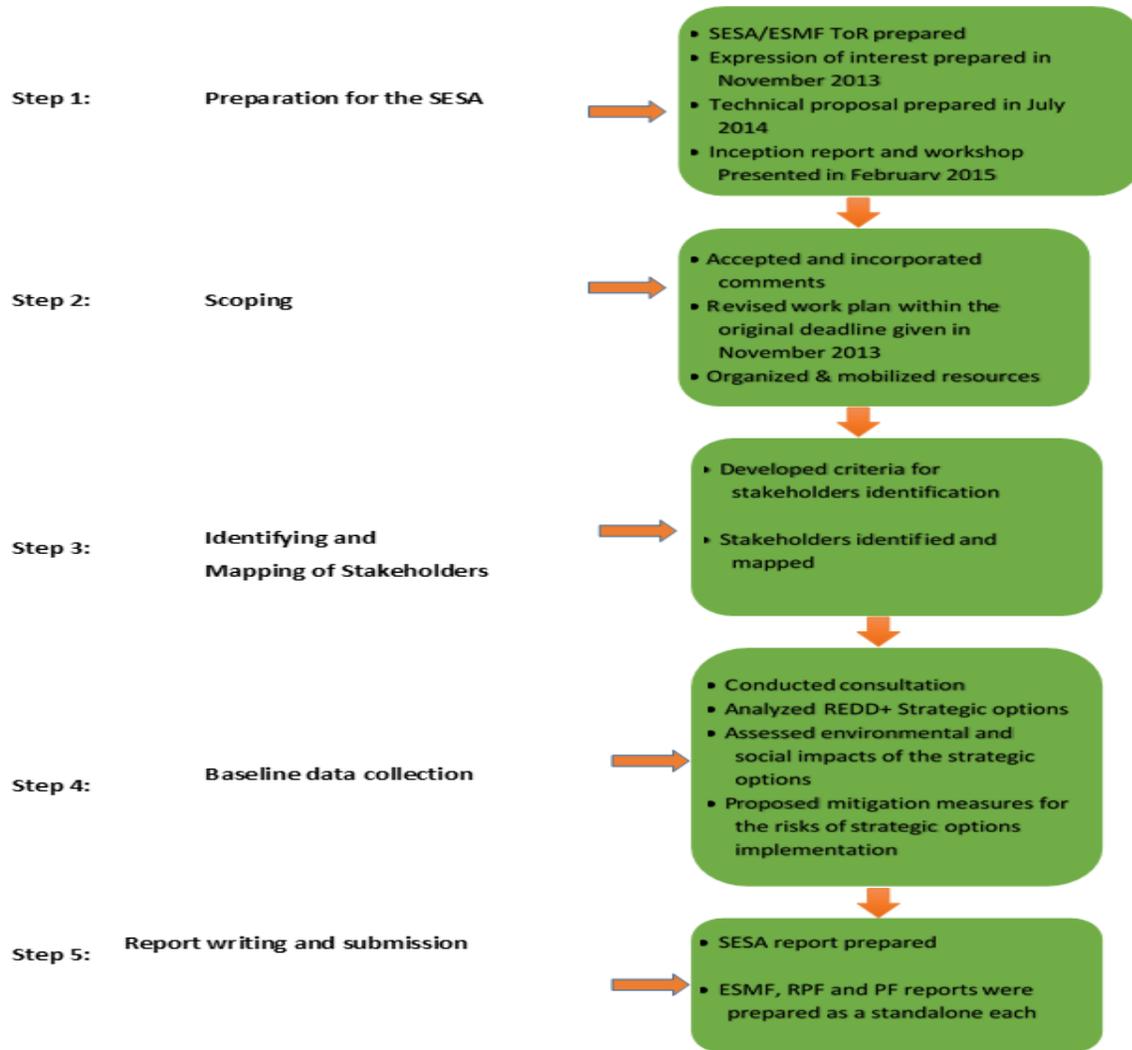


Figure 3: SESA Process Flowchart

## 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

### **3.2.1.1 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)
- The Rural Land Administration and Land Use Proclamation No. 456/2005
- Regulations on land Expropriated and payment of Compensation (Reg. No. 135/2007)
- National Social Protection Policy (MoLSA, 2014)
- 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)
- Climate Resilience Strategy for Agriculture and Forestry (2015)
- Climate Resilience Strategy for Water and Energy (2015)

#### **World Bank safeguards 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)
- World Bank Policy on Dam safety (OP/ BP 4.37)
- World Bank Policy on Consultations and Disclosure requirements (BP 17.50)

## International Legal framework

- 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)

### 3.2.1.2 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 for the assignments. 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 levels** 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 from traditional, social, status, and age and gender biases.

**Interviews at House hold 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.

Table 4: PRA tools used, the levels at which the tools used and the stakeholders addressed by the particular PRA tools.

Level	Data collection techniques				
	Consultation	Focus group discussion (FGD)	Key informant interview	Household interview	Others
National	√		√		
Regional	√		√		
Woreda	√		√		Baseline data
Kebele		√	√	√	
Site observation					52 forest sites visited

### Consultations

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.

### 3.2.2 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:

Table 5: 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
	D <sub>1</sub> : High forest
	D <sub>2</sub> : Woodland
E	D <sub>3</sub> : Bamboo forest
	Socio economic setting
	E <sub>1</sub> : Sites with community based institutions engaged on forest activities (PFM, NTFP)
	E <sub>2</sub> : Ethnic groups diversity
F	E <sub>3</sub> : Cultural practices & diversity
	E <sub>4</sub> : Forest dependent community living within and/or around the forest
G	Plantation Sites to see risks of afforestation /reforestation
H	Regional Administration
	Leakage

### 3.2.2.1 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 (MEFCC 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.

### 3.2.2.2 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.

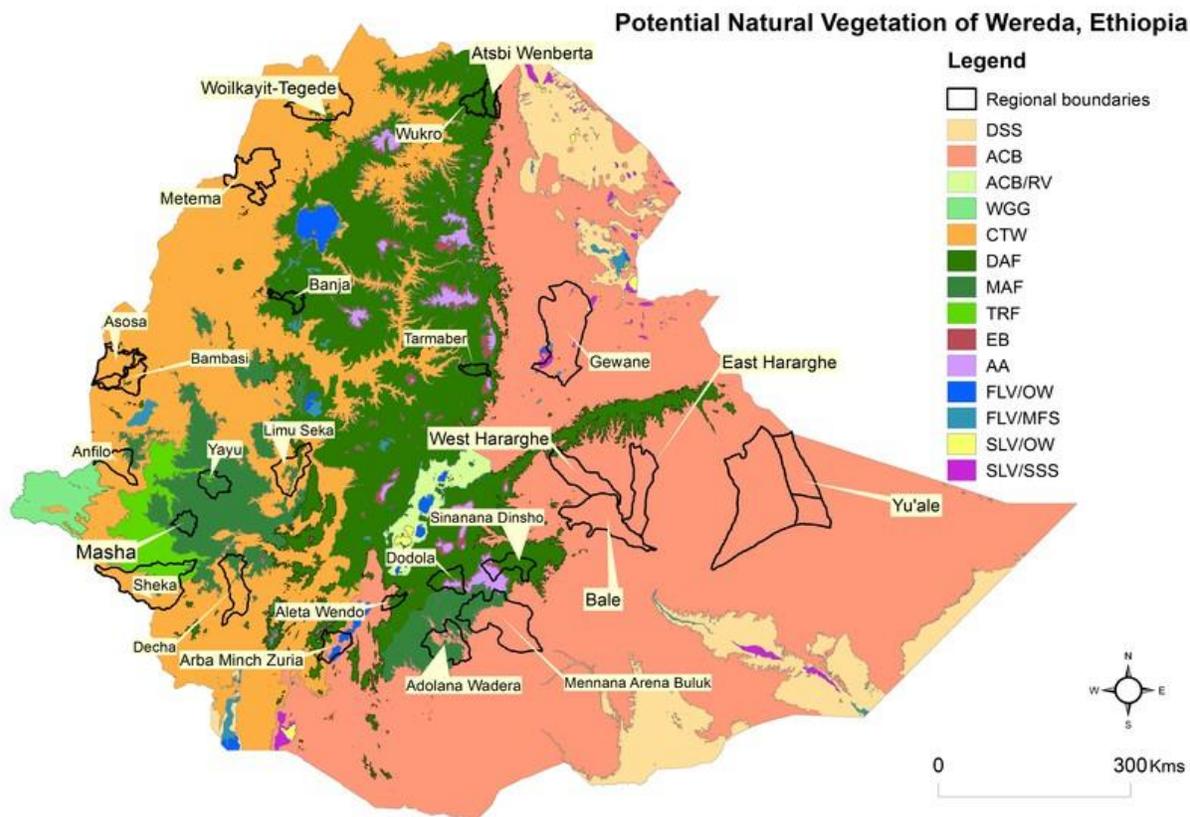


Figure 4: REDD+ Projects Implementation Potential Sites

Code	Land Cover Designation
ACB/RV	<i>Acacia</i> wooded grassland of the Rift Valley.
ACB	<i>Acacia-Commiphora</i> woodland and bushland proper.
AA	Afroalpine belt
CTW	<i>Combretum-Terminalia</i> 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.

### 3.2.2.3 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.

#### **3.2.2.4 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 criterion for selecting of the sample sites.

#### **3.2.2.5 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.

#### **3.2.2.6 Socio-economic settings**

Those communities, 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 segments 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, disabled); and the youth were proportionally represented in the various focus group discussions, key informant and household interviews.

#### **3.2.2.7 Plantation sites**

In different the 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, to rehabilitate catchments, to improve the micro-climate and to improve 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.

#### **3.2.2.8 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 because of the pilot REDD+ regional initiative that is under implementation in the region.

### 3.2.3 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.

Table 6: 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

### 3.3 Gap in knowledge and Limitation of SESA document preparation

- This REDD+ SESA document is one of the first in its kind in Ethiopia. It is also unique that the assessed proposed strategic options are diverse and include different sectoral issues (Forest, Agriculture, Energy, land use and others). The national REDD+ SESA report preparation follows full SESA preparation procedure. It includes: review of all available documents, initiation of baseline studies, scoping of key issues, identifying where the main impacts (positive or negative) are likely to result from Strategy options, undertaking national consultations and initial consultations in sample districts, analysis of potential impacts. However, one of the major limitation of the task team while preparing the SESA document is absence of national Strategic environmental and Social Assessment Regulation, guidelines and standards. Thus, as it is indicated in our recommendation MEFCC in collaboration with partner required to prepare these documents.
- At national level there is no umbrella benefit sharing mechanism/ strategy which helps to avoid unequal benefit sharing practices; 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 inadequate. If this condition continues without getting effective solution, it could be a challenge for the implementation of REDD+. Thus, a robust and transparent benefit sharing mechanisms should be designed with active involvement and broad community support of the local communities. Otherwise, it is difficult to achieve the target set for REDD+.
- Collecting additional information on the role of indigenous knowledge in forest ecosystem governance system contributes to better understanding on how to sustain forest resources, adapt to climate change and paves way to integrate indigenous practices into REDD+ implementation initiatives. In Ethiopia, there are over 80 ethnic groups living under varied climatic conditions with diverse forest ecosystems with diverse indigenous knowledge (IK) and unique way of governing its forest ecosystem. IK might have contributed a lot to the maintenance of the present-day remnant natural forest resource of Ethiopia. In this document, information related to forest management, forest livelihood, ethno- botany and other information were incorporated; however, separately and systematically documenting the indigenous knowledge (IK) on forest ecosystem governance is crucial for better use in development, protection and conservation of the forest resources as well as preserving of indigenous ecological conservation practices. Any sources suggest that community knowledge and scientific knowledge, when combined, can achieve what neither could do on its own. Thus, collecting additional and detailed information from the diverse ethnic groups related to IK on forest ecosystem governance system is required for sustainability of REDD+ programme and help to promote forest dependent community empowerment, ownership, access, and management rights over forests.

## 4. Ethiopia Baseline Situation

### 4.1 Population

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 capitals 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 a 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.

Table 7: Basic demographic indicators for Ethiopia from censuses and projection

Indicator	Census			Projection	
	1984	1994	2007	2013	2014
Population (millions)	42.6	53.5	73.8	86,6	96.6
Growth rate (%)	3.1	2.9	2.6	2.6	2.6
Density (population/km2)	34.0	48.6	67.1		
Percent of Rural/urban	11.4/88.6	87.3/13.7	16.1/83.9		83

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, following 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.

## **4.2 Social Profile of the Country**

### **4.2.1 SNNP Region Social Profile**

#### **Demographic Features**

Southern Nations Nationalities and Peoples (SNNP) regional state is located at the southern and southwestern part of the country. The region shares common borders with Sudan in the west, Kenya in the south, Gambella region in the North West and Oromia region in the east and North. It covers an area of 111,000 km<sup>2</sup> accounting for 10% of the total area of the country. The region based on the 2007 Census conducted by the Central Statics Authority of Ethiopia (CSA), has an estimated total population of 15,042,531, of whom 7,482,051 were men and 7,560,480 women. 13,496,821 or 89.72% of the population are estimated to be rural inhabitants, while 1,545,710 or 10.27% are urban; this makes the SNNPR, Ethiopia's most rural region. This region has an estimated population density of 141 people per square kilometer.

#### **Ethnic and Religious Features**

SNNPR is exceptionally ethnically diverse region of Ethiopia, inhabited by more than 56 ethnic groups with their own distinct language, cultures, beliefs, traditions, rituals, norms, values and social identities living together. These diversified ethnic groups belong to Omotic, Cushitic, Semetic, and Nilo Sahara super linguistic families. In terms of population size the 10 ethnic groups in the region are Sidama, Wolayita, Gurage, Hadiya, Gamo, Keffa, Gedeo, Kembata, Kullo, and Goffa. SNNP is rich in wildlife resources, with three major national parks. Distinctly different from other parts of Ethiopia, it has a mix of fertile grasslands, terraced hillsides, broad rivers and forests.

In the region, the major religious groups in descending order (from high to low) are Protestants, Orthodox Christians, Muslim, traditional religions, Roman Catholics and other religious affiliations.

#### **Culture, Identity and Institution and Resource Management**

The 2007 census reported that the predominantly spoken languages in order include Sidamo, Wlayta, Hadiya, Gurage, Gamo, and Kaffa. Other languages spoken in the State include Kambabta, Mello, Goffa, Gedeo and Dima. The working language of the SNNP regional state is Amharic (the most widely spoken language in Ethiopia).

In most part of the region where forested landscape located have different cultural beliefs that can help for sustainable forest management. For instance, in Keffa where the large natural moist forest found and also the consultation conducted in the SESA process have a number of traditionally respected; even worshiped places as a result of which unnecessary interference with them are socially disapproved. For instance, informants indicated ceremonial and sacrifice sites (Deejjo), sources of big rivers and others are all respected and even worshiped. Besides, there are places of ritual ceremonies in every village in Kafa until today where various sacrifices (Deejjo) are offered to the Eqqos (median spirits). It is traditionally accepted that these places and the trees around them are all rarely touched. It is also indicated that people avoid doing harms on selected forests and bushes for they are traditionally believed to dwell a human-like creature called “Qoolloo”; a spirit believed to inhabit certain forests. The people perceive that “Qoolloo” spirit is huge and frightening, which reside in some selected forests and bushes in every village. Thus, respecting and using such traditional practices in natural forest area will help to promote sustainable forest management.

In the lives of Keffa and Mänjos people, forests are important for their spirit and economy. These until recently have been some of the contributing factors favoring the existences of relatively better natural vegetations, particularly forest cover in the area. However, the situations in Kafa forest lands are facing challenges as happened in the rest of the country. Traditionally held values which keep some rooms for respect to the environment, the belief systems which in one way or another restricted forest degradation, or particular worship places have, in the process, being challenged in the face of dynamic changes in the area. Thus, working with the local community in reducing deforestation and forest degradation will be a win - win situation for REDD+ program and the local community traditional practices.

### **Cultural institutes to manage conflict**

The Shaka Communities lives in the South Western part of Ethiopia mainly in and around forest dominated areas and have kept the Shaka *Gepitato* System intact to date to protect their natural resources. In the Shaka community (Shakacho), the Gepitato system is used to maintain the culture and value of the community. Gepitato assumes the responsibility of administering natural resources such as forests and wetlands, customary dispute resolution, impose and enforce punishments to the violation of traditional rules related to resource management. Gepitatos identify offenders through swearing and cursing defaulters to coercion. In lowland part of the region there is a frequent drought occurrence and have customary dispute resolution mechanisms to address intra-ethnic conflicts. The cultural institution called *Dimmi* (which others in the town call *Denb*) guides their social affairs. Likewise, around Arbaminch Zuria Woreda, there is *Moga* and *Haleqa* traditional leadership institutions which play vital role in grievance management and resolution.

### **Most Vulnerable and Underserved People**

Mänjos people considered as vulnerable and underserved community. The Manjo’s are skilled hunters using traps, hunting nets, and spears. They are also skillful tree climbers, make and hang hives and are the main suppliers of fire wood and charcoal to Bonga town. The Manjo used to live mainly on hunted animals notably porcupines, colobus monkey and wild pig. However, owing to the dwindling number of wild animals and government prohibitions against hunting,

this is no longer the Manjo's main diet. Because of this eating culture and others the Manjo established social distances between Mänjos and other clans in the area. Thus, engaging Manjo's people in the REDD+ process will be crucial to reduce elite capture their vulnerability of the community.

*Pastoralists:* Pastoral and agro-pastoral groups have historically been among the most underserved communities in Ethiopia. Beset as it is by a range of adverse conditions, seasonal migratory pastoralism continues to sustain an increasing population. In low land forest area of the region the local communities such as Hammer, Surma, Nyangatom and others are pastoralist. They fully depend on the woodland resource for their livelihood and are prone for climate change. In the region the role of women as decision-makers is very limited, even on issues that directly affect their rights.

*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.

*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 groups 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.

## **4.2.2 Tigray Region Social Profile**

### **Demographic Features**

Tigray regional State is located in the northern part of Ethiopia. Tigray covers a total land size of 53,000 km<sup>2</sup>. The region borders with Eritrea in the north, Afar and Amhara in the east and in the south and Sudan in the west. The 2007 CSA report indicated that the population of Tigray Region is 4,316,988; of this 2,126,465 are men and 2,190,523 women. In the region 96.55% of the local population inhabited by the Tigrigna speaking Tigray people.

### **Ethnic and Religious Features**

Next to Tigray most other residents belong to Amhara (1.63%), Irob (0.71%), Afar (0.29%), Agaw (0.19%) and Oromo (0.17%). There are also a minority of Nilo-Saharan-speaking Kunama Nilotes (0.07%). Regarding religion, 95.6% of the population is Orthodox Christians, Muslim, 4.0%, Catholics 0.4% and Protestant 0.10%.

### **Culture, Identity and Institution and Resource Management**

The Kunama are ethnic minority living in Tahtay Adiyabo Woreda bordering with Eriteria. Not having much experience in agriculture, they rent their land to others for cultivation. Their livelihood is largely based on the selling firewood, charcoal, and other forest products.

### **Cultural institutes to manage conflict**

In low land part of Tigray region there are conflict resolution mechanism for interpersonal and inter-ethnic nature that emanate from competition for land, pasture and theft of animals. For instance, in Erob area community elders (Aruha) are attempting to bring about peace using the indigenous conflict management mechanisms. The Aruha (community elders) handle the conflict using a series of rules and procedures. In order to have a better grasp of these procedures, one has to differentiate the nature and type of conflicts.

### **Most Vulnerable and Underserved People**

The Kunama are ethnic minority living in Tahtay Adiyabo Woreda, bordering with Eritrea. They rent their land to others for cultivation, where their livelihood largely depends on the selling firewood, charcoal, and other forest products. In addition, the most vulnerable groups in the region are unemployed and land less rural youths, orphans, elderly people and people with disability. Large number of children and/or those who lack access to agricultural family labor are the most severely affected social groups. They often do not have access to land and depend on various informal economic activities (petty trading, charcoal making and selling, fuel wood collecting, traditional hair-braiding, etc).

## **4.2.3 Gambella Region Social Profile**

### **Demographic Features**

Gambella Regional State is located in the south-western part of Ethiopia. Gambella covers a total land size of 24,063 km<sup>2</sup>. The region borders with Benishangul Gumuz and Oromia regions to the North, the Southern Nations, Nationalities and Peoples' Regional State (SNNPRS) and the South Sudan Republic to the South, Oromia and SNNPRS to the east and the Sudan to the west. According to the 2007 national census, Gambella's population included 358,511 people. From the total population of the region male constitute 186,532 and female 171,951, where 74.6% are living in rural areas while the remaining 25.4% found in urban areas.

With a population of over 65,000, the Anywaa spread over eight of the region's nine Woredas covering 70% of the regions land. Nuer is more than double of the Anywaa in terms of population. The Majang, are the third largest local community in Gambella. They lived in Majanger Zone that constitutes two Weredas: Gondere and Mengesh Woreda. They are also found in Abobo in small number. The Komo ethnic group live dispersed in Gambella Zuria Wereda. They also live in Benishagul Gumuz region. The other group, Opo lives in Itang Special Woreda and few also reside in Akobo and Jikaw Woreda.

### **Ethnic and Religious Features**

Gambella is rich with various ethnic compositions. The major ethnic groups include the Anywaa, Nuer, Majangir, Opo, and Komo. The proportion of the local community ethnic group is: Nuer (46%), Anuak (21%), highlanders (20%), Majangir (7%), Komo (3%), and Opo (3%). Opo and Komo ethnic group have relatively small size from the local community. Gambella is also home for people who came from different parts of Ethiopia at various times and in the region the local community call them highlanders. Since the 1980s, Gambella has witnessed a huge influx of

diverse ethnic groups including, Amhara, Kafficho, Oromo, Shakacho, Kambata, Tigrean and others. Ethnic group from Amhara, Tigray and SNNPR (e.g. Wolayita) live in settlement areas in Abobo, Gambella and Itang woredas and practice sedentary agriculture. Regarding religion, Protestants constitute the highest and Orthodox Christians, traditional religion, Muslims, Catholics, and others.

### **Culture, Identity, Institution and Resource Management**

Gambella region has a considerable and varied natural resource base. It has vast water resources like rivers (Baro, Alwero, Akobo and Gilo, which flow throughout the year), lakes and streams. They have also large area of arable land and significant number of livestock. The region also has various types of minerals. Gambella National Park, which covers approximately 5061 km<sup>2</sup>, is the other natural resource base for the region. It contains large part of the natural forest resource of the region.

The Nuer people are largely livestock dependent and are mostly found in Akobo, Jikawo and parts of Itang woredas. Riverside agriculture is commonly practiced by Anywaa people along the Baro, Gilo and Akobo rivers. As the region is generally not cereal self-sufficient, alternative livelihood sources such as fishing are important sources of food. Wild food consumption is part of the daily dietary intake from intact natural forest resources. Most of the Nuer population reside along the Ethio-Sudanese border (Akobo and Jikawo woredas), where it is too dry for rain fed agriculture. Therefore, livestock constitutes the primary source of income.

During rainy seasons, Akobo and Jikawo become flooded and the people therefore migrate to the highlands with their cattle until the riverbanks retreat. The Nuer living pattern changes according to the seasons of the year. As the rivers flood, the people have to move farther back onto higher ground, where women cultivate millet and maize while men herd the cattle nearby. In the dry season, the younger men take the cattle herds closer to the receding rivers. The Nuers have indigenous institution called "*Lowok*" through which they help one another and the outsiders.

Anuak is the second ethnic group in the region. They are mainly crop (sorghum and maize) dependent people with fishing in the Baro and Akobo rivers mainly in the dry season and hunting are used as their supplementary dietary and income sources. Recession riverside agriculture is a common practice by Anuak people along the Baro, Gilo and Akobo rivers. The Anuak are polygamous society and favor living in extended family groups in scattered settlements on the banks of the Baro River in front of their agricultural fields. The Anuak worship '*Ochudho*', '*god of the river*' is responsible for the origin of their kings and chiefs.

The Majangir people are the third ethnic group living in Godere woreda and in some pocket areas of Gambella and Abobo. They have no political leaders, the only individuals of any authority being ritual leaders whose influence is restricted. The Majangir belonging to the Nilo-Saharan linguistic group. Shifting cultivation is still widely practiced among the Majanger in Gambella Zuria Woreda. They slash and burn the forest and cultivate it for two to three years then leave for another forest site to do the same. Other livelihood activities include beekeeping, especially wild bee in the forest and hunting and gathering. Their lifestyle is highly dependent on the forest and forest products, thus give due attention for forest resource conservation.

REDD+ need to work with this local community in promoting sustainable non-timber forest product for sustainably conserving the prestige remnant moist forest resource of the area. In resource management and land use, the Majanger have an indigenous institution called *Jung*. The Majanger have also an indigenous self-help association called *Kokony*. In *Kokony*, the poor can be helped people in the ethnic group has the rights to use the resources of the rich. There is no strong concept of private ownership among the Majanger. The same resource can be used by multiple users. Thus, bundle of rights concept of property rights does work for the Majanger.

### **Cultural institutes to manage conflict**

As mentioned above, while Anywaa are primarily cultivators, the Nuers are mainly pastoralists. Traditionally, the two groups have reciprocal arrangements whereby the Nuers have access to grazing land and the Anywaa benefit from milk and some cattle provisions. Whenever small conflicts arise, elders from both groups gather to arrange for blood payments made in the form of a certain number of cattle as compensation lost human lives. Elders break weapons such as spears symbolizing that no more hostility will take place. Conflicts in Gambella are mainly categorized into three local, national and transnational. Mejanger ethnic group have traditional forest land-related dispute settlement mechanisms, called “*Guten*” and it comprises elders and religious leaders. This also needs to be considered used at local level REDD+ grievance redress mechanism.

### **Most Vulnerable and Underserved People**

In general, the local community (Nuer, Anuak, Majangir, Komo, and Opo) in Gambella are considered as among the most underserved communities in Ethiopia. Moreover, in the last decade particularly the area where the Anywaa ethnic group settled is required by agricultural investors. This is one of the pull factors for massive agricultural investments that create livelihood related vulnerability for the Anywaa. Thus, the strategic options suggested to address the problem related to large scale agricultural investment need to be properly implemented by engaging the local community to reduce vulnerability. In the region Women are the most vulnerable group regarding their right; and, they are underserved social segment in education.

## **4.2.4 Benshangul Gumz Region Social Profile**

### **Demographic Features**

Benshangul Gumuz Regional State (BGRS) is located in the western part of Ethiopia. Benshangul Gumuz covers a total land size of 50,380 km<sup>2</sup>. The region borders with Gambella, Amhara and Oromia regions and the South Sudan. According to the 2007 national census, Benishangul-Gumuz Region has a total population of 784,345 consisting of 398,655 men and 385,690 women. The population residing in the rural parts of the region comprise 93.22%. Widely used languages in the region are the Berta (25.1 5%), Amharic (22.46%), Gumuz (20.59%), Oromo (17.69%), Shinasha (4.58%) and Awngi (4.01 %).

### **Ethnic and Religious Features**

In Benishangul-Gumuz five ethnic groups including Berta (25.9%), Gumuz (21.1%), Shinasha (7.5%), Mao (1.8%) and Komo (0.96%) are found. Other groups include Amhara (21.3%), Oromo (13.3%), and Agaw-Awi (4.2%). Berta is an ethnic group living along the border of South Sudan

and Ethiopia. Regarding religion, 45.4% of the population are Muslim, 33.3% Orthodox Christians, 13.53% Protestant, Catholic Christian (0.6%) and 7.09% practiced traditional beliefs.

### **Culture, Identity, Institution and Resource Management**

The large ethnic group in Benshangul Gumuz region are the Berta people who are agrarian and practice slash-and-burn agriculture. Their staple food is sorghum.

The Gumuz grow a variety of crops such as cereals, oil seeds, legumes and root crops. The most commonly grown cereals include finger millet, sorghum and maize. Finger millet and sorghum are staple crops. Sesame and Niger seed often used as cash crops. Gumuz people practice shifting cultivation. During food shortage, the Gumuz carry out hunting, fishing, and gathering. They also engage in apiculture. The local land use system of the Gumuz has been a 'controlled access' system, combining individual possession with communal ownership. Members of the society enjoy equal access to communally owned land, such as cultivable virgin lands, forested areas, grazing land, and riverbanks as a matter of right. Thus, accordingly, these resources are owned by the Gumuz society in general.

Shinasha is the third local ethnic group that have their own cultural identity and language called *Borenona'a*. The *Borenona'a* is widely spoken in the lowland part and those who have less interaction with others. In Wombera, since there are strong historical relations and cultural adaptations with the Oromo, the Shinasha ethnic group practice the 'gada' system (a generation-based traditional system of local governance among many Oromo groups in Ethiopia) and mostly speak Afan Oromo language. The Shinasha have also adopted many cultural traits from both the Amhara and the Agaw.

### **BGRS cultural institutes to manage conflict**

In BGRS the Shinasha ethnic group has indigenous resource based conflict management institution. The institution is called *Nemo*. This indigenous institution has four hierarchical structures. The lowest level is *Bura* at which minor cases are handled by an elder. The next is *Nemma*, two elders deal with new cases or appeal cases from *Bura*. The third is *Terra/Tsera*, a setting chaired by three elders dealing particularly appeal cases from other owner levels of the *Nemo*. The last and the highest authority in *Nemo* judicial structure is *Falla*. This local level indigenous land resource based conflict handling institution will be an instrument for conflict that can arise while implementing REDD+.

### **Most Vulnerable and Underserved People**

In Benishangul-Gumuz the five ethnic groups Berta, Gumuz, Shinasha, Mao and Komo are identified as underserved community groups. Among these the Mao and Komo are the most underserved ethnic group. Thus, while implementing the different phase of REDD+ the implementing institutes need to engage these stakeholders at different level. In general, in all ethnic groups of the region's women are classified as vulnerable.

## 4.2.5 Afar Region Social Profile

### Demographic Features

Afar Regional State is populated with roughly 1.4 million people (CSA, 2007). Nearly 87% of the population are rural, mainly dependent on pastoral and agro-pastoral livelihood systems. Women constitute about 44%, while men constitute 57% of the total population in the regional state. In terms of age distribution, about 43% of the population is young below the age of 15 years. The region has an estimated density of 14.59 people per square kilometer. For the entire region 247,284 households were counted, which results in an average for the Region of 5.7 persons per household, with urban households having on average 3.9 and rural households 6.1 people.

### Ethnic and Religious Features

In terms of ethnic composition, the Afar 91.8%, Amhara 4.5%, Argoba 0.92%, Tigray 0.82%, Oromo 0.7%, Wolaita 0.45%, and Hadiya 0.013%, constitute the regional population (CSA, 2007). The 96% of the population in the region are Muslim, 3.86% Orthodox, 0.43% Protestants, 0.09% Catholics and others constitute 0.02%. The Afarigna language is predominantly (90.8%) spoken in the region.

### Culture, Identity, Institution and Resource Management

The Afar practice livestock rearing predominantly. They also engage in agro pastoral along the Awash riverbanks as their main source of livelihoods. They draw their main livelihood from rearing animals such as camel, cattle, sheep, goats and donkey. In some Woredas where there is access for water, they practice both crop farming and livestock rearing to support their livelihood. Thus, livelihood of the local community of the region are dependent on natural resource.

In Afar culturally the local community have information exchange system called *Dagu*. It is an oral, interpersonal communication/ritual which they perform when one meets another. Failure to pass on relevant information is not only an offence to the conversation partner, but considered harmful to the community. In the REDD+ process engaging local community is one of the requirement for REDD+ participant countries. Thus, REDD+ will exploit on existing customary information sharing system i.e. *Dagu* in disseminating and sharing knowledge and best practice among communities. Religion and clan/family membership are the key social ties keeping the social cohesion of people in Afar.

### Cultural institutes to manage conflict

The Afar believe that all disputes within their ethnic group should be settled peacefully and according to the long standing customary laws (*Mad'aa*). *Mad'aa* consists of specified guidelines and rules on how to handle dispute cases. Most cases of intra-Afar conflicts are resolved outside courts. The Afar People generally tend to channel disputes to local mediation where conflicts are addressed in a less rigid manner, compared to the modern court where adjudication is based on largely standardized and uncontested rules. Thus, using such indigenous conflict resolution mechanism when grievance arise in REDD+ proposes is important.

### **Most Vulnerable and Underserved People**

In general, the Afar and Argoba ethnic group are vulnerable and underserved community groups. In addition, women are vulnerable group. It is uncommon for women to speak and share concerns and life experiences in Afar without the permission of male clan members. They shy away to speak, as they consider their male counterparts as their spokesperson. This is also reflected in the leadership positions in formal and informal institutions, in the area of participation and memberships of clan institutions. Thus, during consultation in REDD+ process getting their voice is curial since they have strong attachment with the woodland resource in the region. In Afar women have no access to financial income earned from the sale of livestock and grain.

### **4.2.6 Somali Region Social Profile**

#### **Demographic Features**

The Somali Regional State (SRS) covers some 219,516km<sup>2</sup> across northeastern Ethiopia. The Region borders Afar and Dire Dawa, Oromia regional states to the west, Djibouti to the north, Somalia to the south, north and east and Kenya to the southwest. According to CSA (2007), the Somali Region has a total population of 4,445,219 consisting of 2,472,490 men and 1,972,729 women.

#### **Ethnic and Religious Features**

Ethnic groups include Somalis (97.2%), Amhara (0.66%), Oromo (0.46%), foreign-born Somalis (0.20%) and Gurages (0.12%). Somali was spoken by 96.82% of the inhabitants. Other major languages include Amharic (0.67%), and Oromifa (0.51 %). Regarding religion 98.4% of the population is Muslim, 0.6% Orthodox Christian and 1.0% are followers of all other religions. Ethiopian Somali Region is characterized by linguistic and religious homogeneous population.

#### **Culture, Identity, Institution and Resource Management**

The social structure of the Somali People are clans, sub-clans, lineages and families. The custom of traditional Somali society, including personal identity, rights of access to local resources, customary law (*xeer*), blood payment groups (*diya*), and support systems are fastened on the clanship. *Xeer* is the set of rules, regulations, and values that form the foundation of Somali society. *Xeer* can also represent agreements between sub-clans that govern their relations and lay out rules for interaction, but not all sub-clans have *xeer* with one another.

Each community within the clan system is differentiated and unique, and tend to live in extended families, sharing resources for basic subsistence; and well established social capital and network, which is used to support needy individuals which is either obligatory or voluntary.

Pastoralism and agro-pastoralism are the main activities and livelihood of the Somali people. Somali pastoral people have a culture chiefly centered on camels with a few cattle and goats in the more productive areas. Families live in portable huts; each wife has her separate hut made of bent saplings and woven mats. Home building and home making are the women's responsibility. Young men and boys are responsible for herding the highly esteemed camels and women and young children care for sheep and goats. A man is allowed four wives under Islamic law and polygamy is widely practiced. Divorce is the right of men only and is easy and common

among the Somali. In case of divorce, the children are divided by gender, boys to the father and girls to the mother.

Along the western edge there are an increasing number of rural families with few livestock assets who practice rain-fed cultivation. Browse from trees and shrubs are a vital component of livestock feed cattle, goats and camels. On this basis, it is estimated that browse from trees provides nearly half of the total energy requirements of the Region's livestock. Similarly, with an expanding population, consumption of wood for fuel within the Region is increasing. In many areas there has been a dramatic decline in trees and shrubs. Given the vital contribution of browse to the livestock population any decline in tree and shrub cover will have a very serious and negative impact on livestock production.

In the region related to natural resource management particularly forest resource challenges are observed due to charcoal production and deforestation, which is occurring most intensely in the Degehabur and Jijiga Zones. There, charcoal traders, most of them from Hargeisa in Somaliland, frequently visit to purchase charcoal for nominal sums to be transported back to Hargeisa and often on to the Gulf states. Their activity comes at a high cost, though, as charcoal production requires burning trees that will take decades to grow back, if they ever do.

#### **Cultural institutes to manage conflict**

In Somali region traditional conflict management mechanisms utilized for centuries and still quite effective in certain situations. The *guurti* elders are the judge and jury and their decisions are largely adhered to and respected. *Omens* are members of the *guurti* councils. Clan and religious leaders are also responsible in resolving conflicts through norms and traditional laws. The community has strong social capital based on traditional relationships within the community that entirely depend on kinship ties, marriage relationship and other social obligations.

#### **Most Vulnerable and Underserved People**

Youth groups; more importantly, girls in Somali Region are representing vulnerable and underserved segment of the Somali society. Thus, youth are forced to engage on charcoal production as described above for their livelihood. There is nothing traditional about charcoal production nor is there stature to be gained through its production. Thus, REDD+ need to engage the youth in implementing strategic options identified to address deforestation and forest degradation caused by charcoal making. Poor households in the community are more vulnerable to risks and shocks. In Somali, women are usually subordinate to men and their role is confined only to the household chores and child care. They rarely have access to productive resources and have very limited participation in important household decisions.

## 4.2.7 Oromia Region Social Profile

### 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 200717 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.

### 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 that 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:

- 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.
- 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.
- The Southern Oromo consist of smaller sub-groups without regional cohesion. Many are pastoralists and have a semi-nomadic lifestyle.

- 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.
- 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 below). 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 km<sup>2</sup>, 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.

### **Traditional Resource Management and Conflict Resolution**

Traditional resource management practices of the Borana 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 Fooraa), 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 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.

### **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 regional 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 strong and 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 ritual 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.

### **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;

- a. *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. REDD+ 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 REDD+ related activities. REDD+ 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 REDD+ 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 the region's adaptive management.
- b. *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.
- c. *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.
- d. *Unemployed Rural Youth*: These vulnerable segments 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.
- e. *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.

- f. *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 groups 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 groups 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.

#### **4.2.8 Amhara Region Social Profile**

##### **Demographic Features**

Amhara regional state has common boundaries with four national regional states of the country, Oromia in the south, Afar in the east, Tigray in the north, and Benishangul-Gumuz in the west. It also shares a common boundary with the neighboring country, Sudan, in the west. According to the 2007 census, the region has about 20,650,419 people. About 87.3 % of the population lives in rural areas and 12.7 % in urban areas. Amhara covers a total area of approximately 154,000 km<sup>2</sup>. Geographically the region covers around 15% of the country area.

##### **Ethnic and Religious Features**

The majority (91.48%) of the population is Amhara; other groups include the Agaw/Awi (3.46%), Oromo (2.62%), Agaw/Kamant (1.39%), and Argobba (0.41%). Of the total population of the Region, 82.5% are Orthodox Christians, 17.2% Muslim, 0.2% Protestants and 0.1% others.

##### **Culture, Identity and Institution and Resource Management**

The topographic feature of the region is characterized by rugged mountains, hills, valleys and gorges. Therefore, the region has varied landscapes composed of steep fault escarpments and bordering lowland plains in the east, nearly flat plateaus and mountains in the centre, and eroded landforms in the north. Most of the western part is a flat plain extending to the Sudan lowlands. The overwhelming majority of the population is engaged mainly in subsistence agriculture.

Agriculture and livestock production are the main livelihood sources of the region. Forestry is the other product of the region that the population depends on for domestic firewood, construction, and utility pole contributing to the country's economy. The region has a wide biodiversity of flora and fauna. However, increase in population, livestock, and increased demand for arable land are causing a significant depletion of forest resources. Loss of cover results in high rate of soil erosion, loss of soil fertility, and degradation of water resources. These factors in turn, adversely affect agricultural productivity. Soil fertility is further depressed where animal dung and crop residue are diverted for fuel to compensate for the shortage of wood. The cumulative effect of this chain of events is reflected in the prevailing land degradation, poor economic performance, and accelerated poverty.

Culturally the local community in the region practice crop rotation to maintain productivity of the land and it is considered as one of the important livelihood strategies. Crop rotation is harvesting some crop species in one harvesting season and changing the others for the next harvesting season. This help them to get the maximum outputs from the available land in the communities. In addition to that, crop rotation enabled them to produce different crops two or three times in a year from the same farmland and to utilize the land in a better way without putting a strong pressure on it.

In Amhara region there are diverse cultural and local institution used for sustaining their livelihood. For instance, *Wonfel*, *Hura*, *Kenja* and *Temad* are system established by the community for collaborative work teams organized to do agricultural and other activities. *Wonfel* helps farmers to work together during different occasions such as harvest collection, house construction, wedding ceremony preparation and others. Besides, *Hura* in Gojjam area enabled the communities to improve their farming and grazing lands fertility by using their cattle dung. They gather their cattle together during the nights of the dry season on the farm and grazing lands of each member and they use the dung to rehabilitate the fertility of the eroded soil. *Kenja* also enabled the farmer to share their plowing equipments to perform their agricultural activities. Considering these cultural practices in REDD+ process will promote effective implementation of strategic options such as afforestation and reforestation in the region.

### **Traditional Resource Management and Conflict Resolution**

In many areas of the Amhara region, the main indigenous conflict resolution mechanism is the *Shimgelina*. In essence a council of elders, the *Shimgelina* is a collection of five *Shimageles* (elders) who are appointed by the disputing parties themselves based on their choice. These elders are likely to evaluate the evidence of the conflicting parties and formulate their decisions based on existing norms and values of the society and to handle their cases. Shimageles often rely on different networks and other means of information. From the networks that most commonly revealed is the *Mahber*, a religious association that involves the men and women gathering once a month to honor a saint or an angel of significance to the community like *St. Gabriel*, *St. Michael*, *St. Marry* and the like. *Shimglina* is commonly practiced method of indigenous conflict resolution which many people used to settle their conflict in Amhara region. The major reasons that this conflict resolution mechanism used by the people are:

- The cost of indigenous conflict resolution system like material cost, transportation cost, time and other costs become low;
- The process of indigenous conflict resolution system takes greater speed;
- Implementing this approach does not require sophisticated party structures or expensive campaigns; but formal conflict resolution systems are expensive;
- Increase social harmony, addressing common problems of the society and increase support of each other and tolerance;
- It help the re-establishment of social relationship or bringing together of the society in general and conflicting parties in particular.

### **Most Vulnerable and Underserved People**

In the region like other regions of Ethiopian women are vulnerable groups because of low societal attitudes; their socio-economic status manifested with inadequate property right; low educational status; women's awareness of their rights and others. Unemployed rural youth are vulnerable segment of the population including 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. 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 are also vulnerable segment of the people. Thus, REDD+ need to ensure engagement of women in all phases of REDD+.

### **4.3 Grievance Redress Mechanism**

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

Grievances usually arise during use, conservation and management of resources. Forest grievance is one of the major grievances in developing countries where the livelihood of millions of people is linked with forest resources. Grievance over forest is defined by some scholars (Engel and Korf, 2005) as disagreement between or among individuals, different parties on access to, control over and use and conservation of forest resources. Others also defined grievance as 'all kinds of opposition or antagonistic interaction usually based on scarcity of resources, power or social opposition and differing value systems (Fisher et al. 2000). There are different underlying causes for grievance based on the nature of the resource and parties or stakeholders involved. Some classified the causes of grievance as political, socio-cultural and economic reasons (e.g., Odhiambo, 1996) while others explain the causes of forest grievance as originating from tenure right, need to save the endangered species and other reasons related to economic importance. Grievance is also observed to have both negative and positive sides. The negative side is that it can develop into violence thus contributing to degradation of resources including deforestation of endemic species. Grievances can also play a positive role in the sense that it brings all relevant stakeholders to negotiation for effective conservation and use of forest resources. As long as grievance is a disagreement between or among different individuals or parties on the use, control over and management of forest resources, attempts should be made to resolve or manage this grievance based on common understanding of the underlying causes. There are different causes and management approaches to grievances. Hence, it is essential to analyze the stakeholders' power and the possible management mechanisms in the context of the grieving parties and the resource under consideration.

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 field observations indicated there are different mechanisms of grievance redress mechanism 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 redress mechanisms as indicated in the section above. In addition, local informants encourage use of traditional conflict and resource management systems compliance with the local context.

The principles used to address grievance that arises while implementing REDD+ include **Legitimacy, Accessibility, Predictability, Equitability, Rights-compatibility, and Transparency**. These six GRM principles are in line with the national REDD+ GRM guideline. Similarly, the procedures to address grievance will follow the procedure indicated in the national GRM guideline. The Program would make use of the existing Kebele, Woreda, Zonal, Regional, and federal Public Grievance Hearing Offices (PGHO) in the country.

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. A complainant has the option to lodge his/her complaint to the nearby EIO branch in person, through his/her representative, orally, in writing, by fax, telephone or in any other manner.

#### **4.4 Forest Resource Base**

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 is estimated to be about 15%.

The extent and forest types have been reviewed by Yitebitu Moges et al. (2010) which have 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-MOANR/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 (Figure 5). 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 shrublands 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.

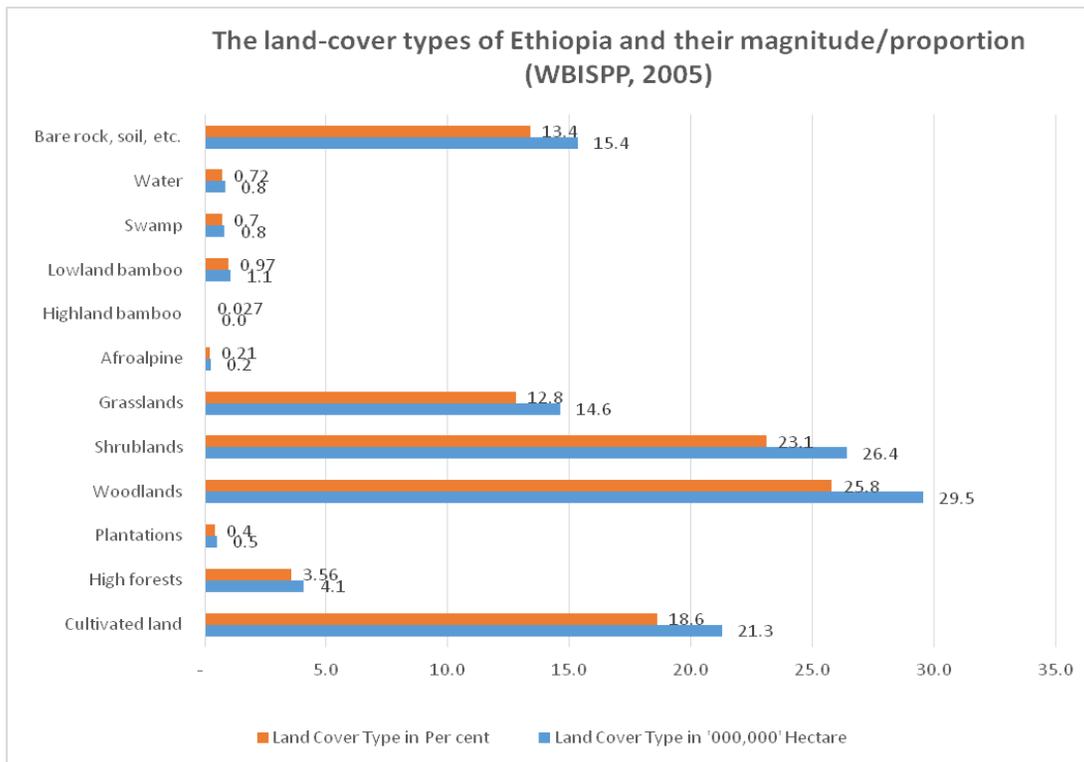


Figure 5: The land-cover types of Ethiopia and their magnitude/proportion (Source: WBISPP, 2005)

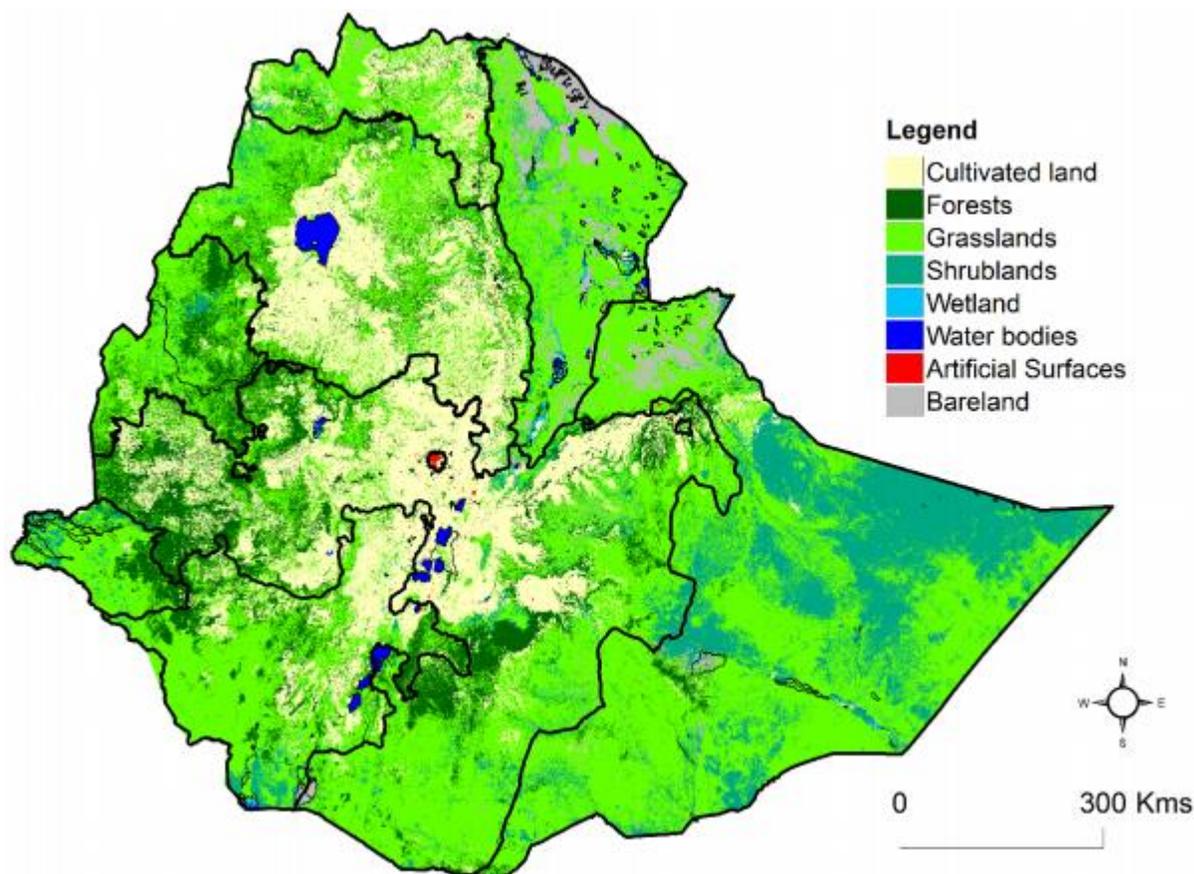


Figure 6: LCLU Map of Ethiopia  
(Source: Chen et.al. 2015).

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 15.11million 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.

Table 8: Forest land cover change by region in two time periods

Regional state/ Admin	Forest cover 2003 (ha)	Forest cover 2008 (ha)	Change (ha)	Change (%)	Change per year (%)
Addis Ababa	2931	5291	2360	80.5	16.1
Afar	224858	149843	-75015	-33.4	-6.7
Amhara	1282260	1935084	652825	50.9	10.2
Benshangul-G.	1137792	1276102	138310	12.2	2.4
Dire Dawa	5001	10119	5118	102.3	20.5
Gambella	319293	688429	369136	115.6	23.1
Harari People	1466	2906	1440	98.2	19.6
Oromiya**	5638740	6599583**	960843	17.0	3.4
Somali	856027	1057638	201611	23.6	4.7
SNNPR	2366706	2709114	342408	14.5	2.9
Tigray	303668	381751	78083	25.7	5.1

Source: Ethiopian Mapping Agency LULC analysis of the period between 2003 and 2008

\*\* Currently, the forest cover of Oromia region is estimated to be 8.7 million ha. This figure is provided in the current ESMF report of OFLP (2015).

#### 4.4.1 Spatial Distribution of the Forest Vegetation Resources of the Country

##### 4.4.1.1 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 (such as Abijata-Shala Lakes, Nechisar, Omo, Mago, and 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 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 Montane 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.

## iii. Moist Evergreen Afromontane Forest

This vegetation type is in most cases characterised 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 Haremma 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.

#### iv. 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.

#### v. 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.

#### vi. 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 sub afroalpine habitats in Africa. These environments are highly fragile due to the extreme climatic conditions (low temperature, harmful short wave radiations, 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 sub afroalpine 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 Forset 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.

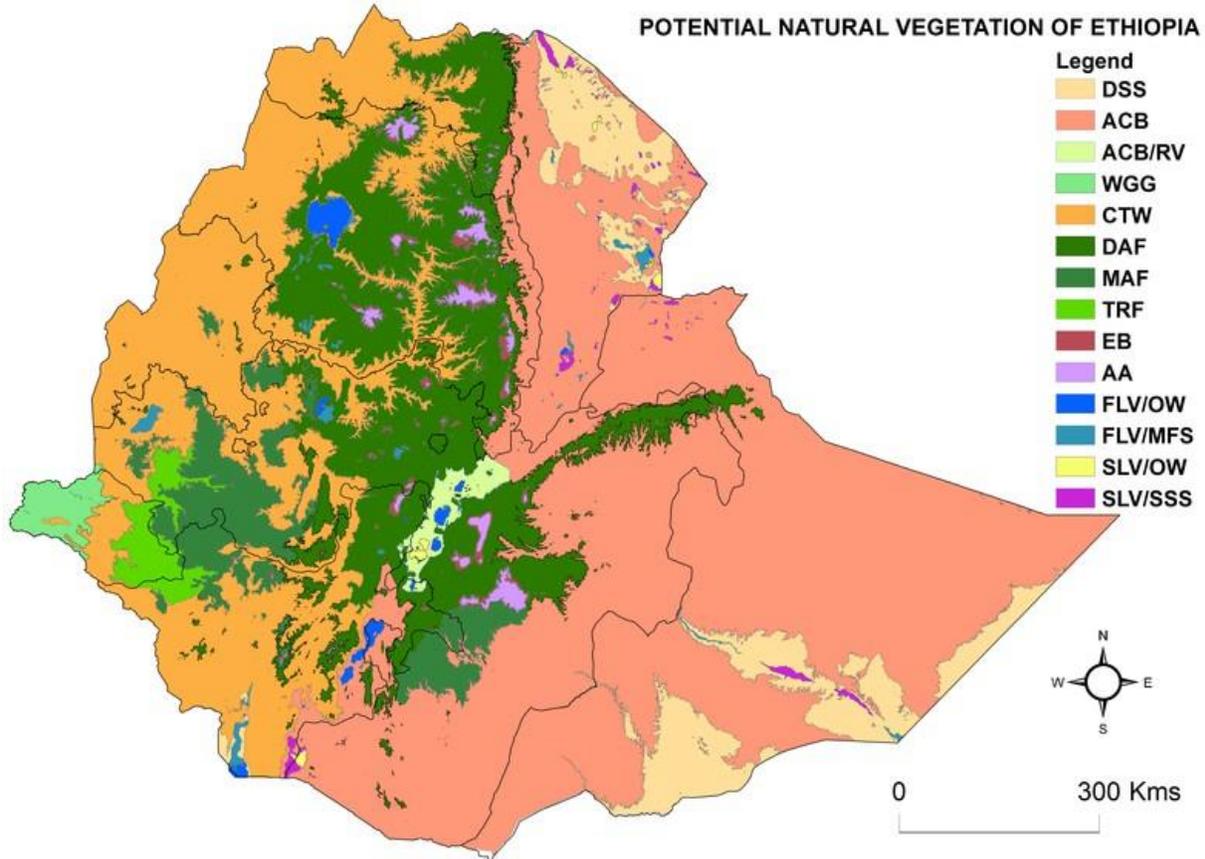


Figure 7: Potential Vegetation Map of Ethiopia

(Source: Friis et al. 2011)

#### 4.4.1.2. 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 occurs in the northern and central parts of Ethiopia where the sub-humid climate prevails while moist evergreen forest occurs 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 leafed 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 indicates 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-friedericij*, *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.

#### 4.4.1.3. 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.

#### **4.4.1.4. 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).

### 4.5 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.

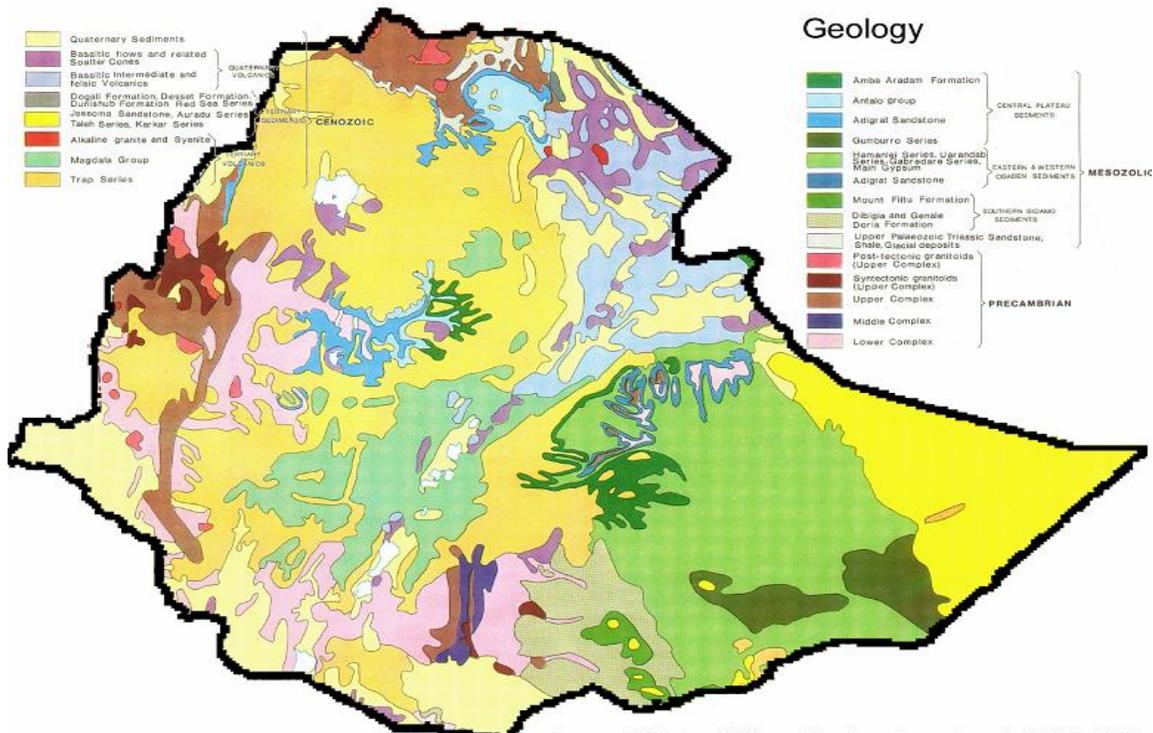


Figure 8: Geology of Ethiopia

Source: Modified after the Ethiopian Mapping Authority (1988)

### 4.6 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.

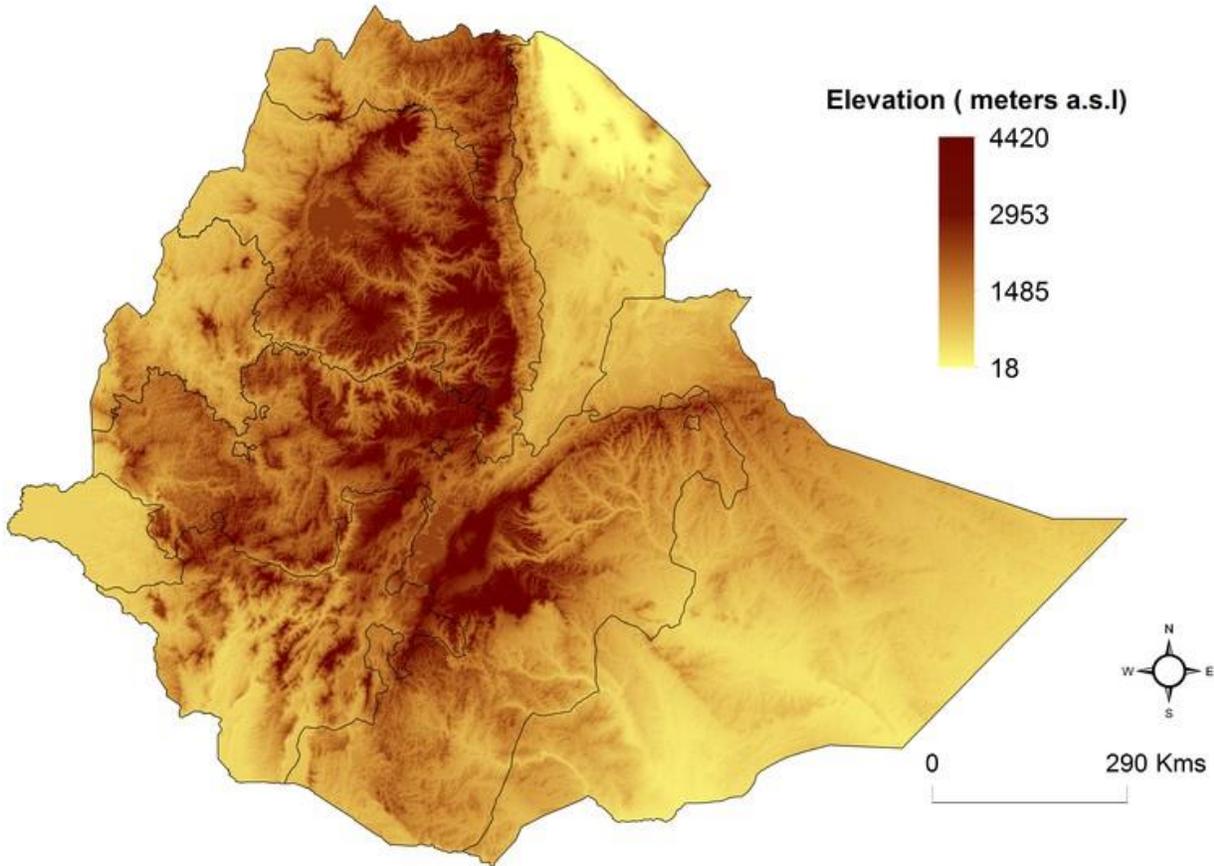


Figure 9: Topography/ Relief of Ethiopia

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.

#### 4.7 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 are 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).

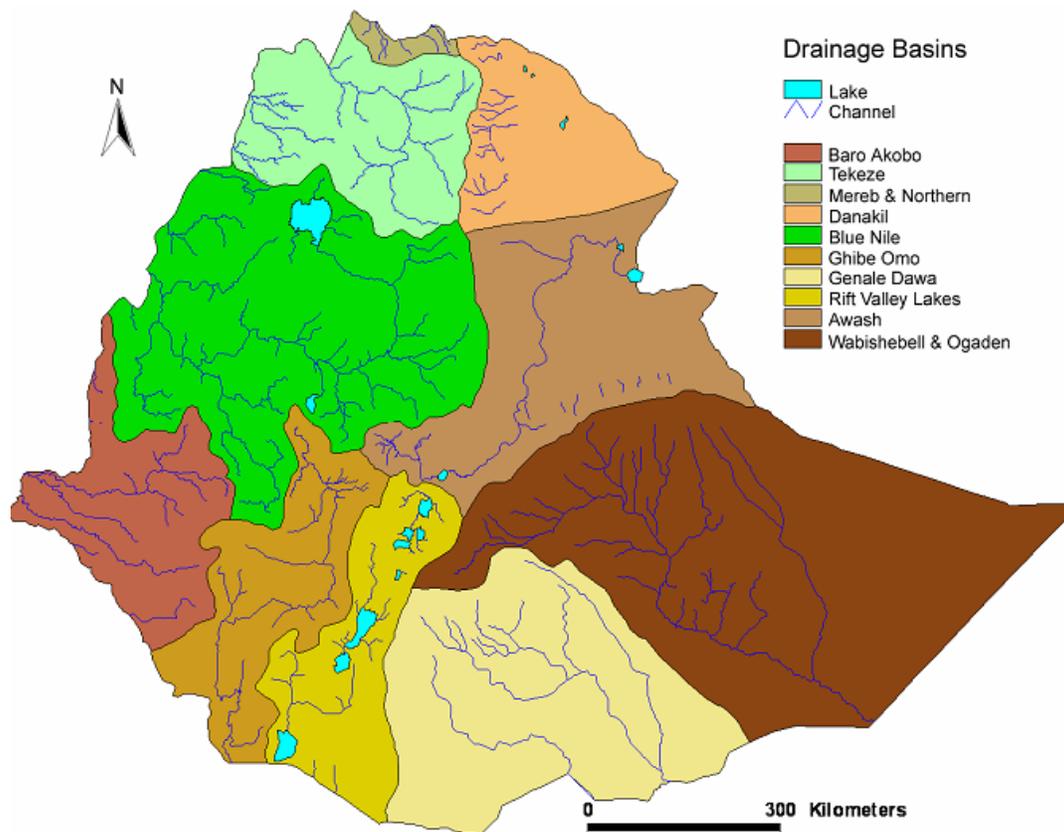


Figure 10: Drainage Basin of Ethiopia

Source: Sileshi Bekele, 2001

#### 4.8 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.

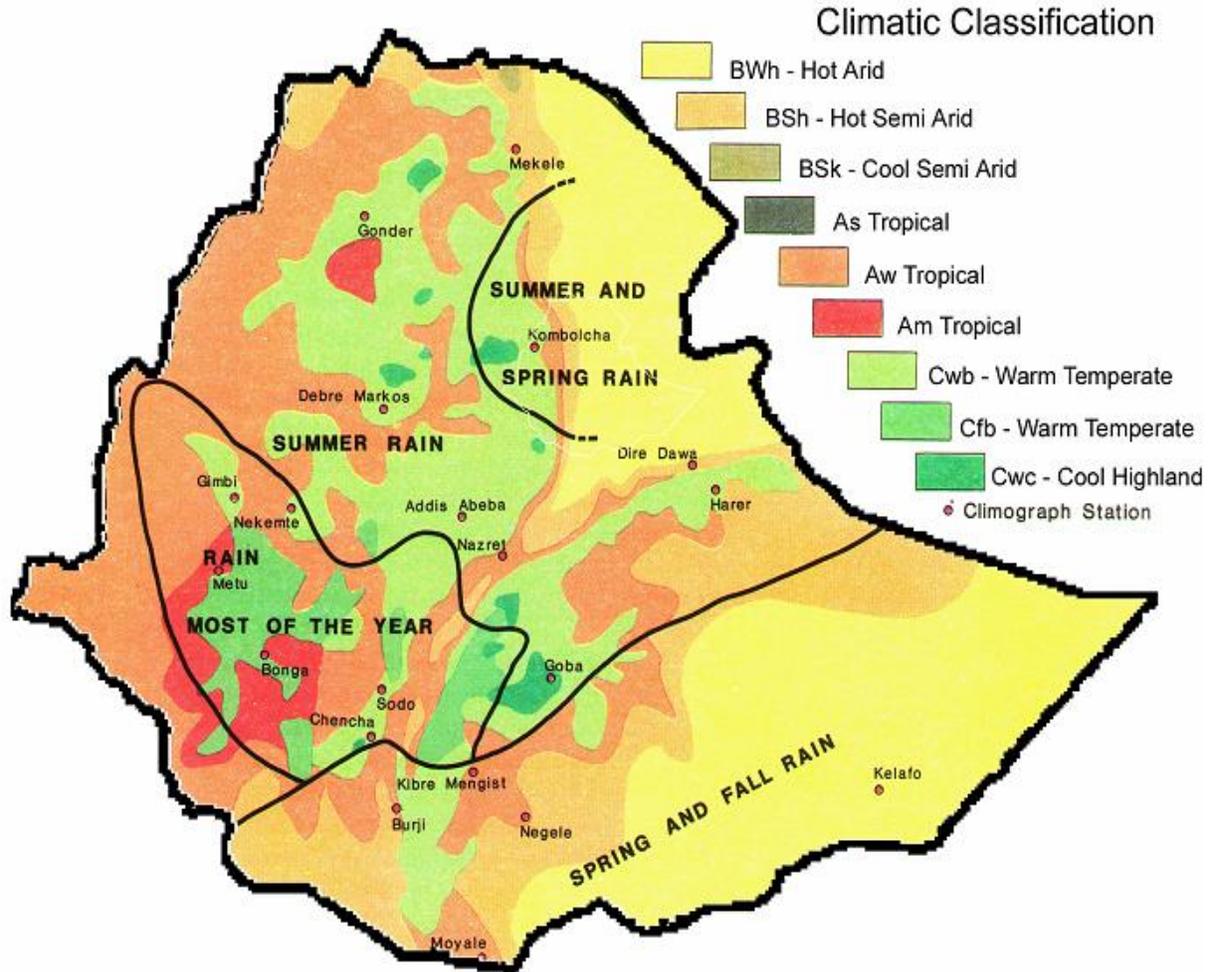


Figure 11: Climatic Classification after Köppen & Geiger  
(Modified source: Ethiopian Mapping Authority Services, 1988)

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.

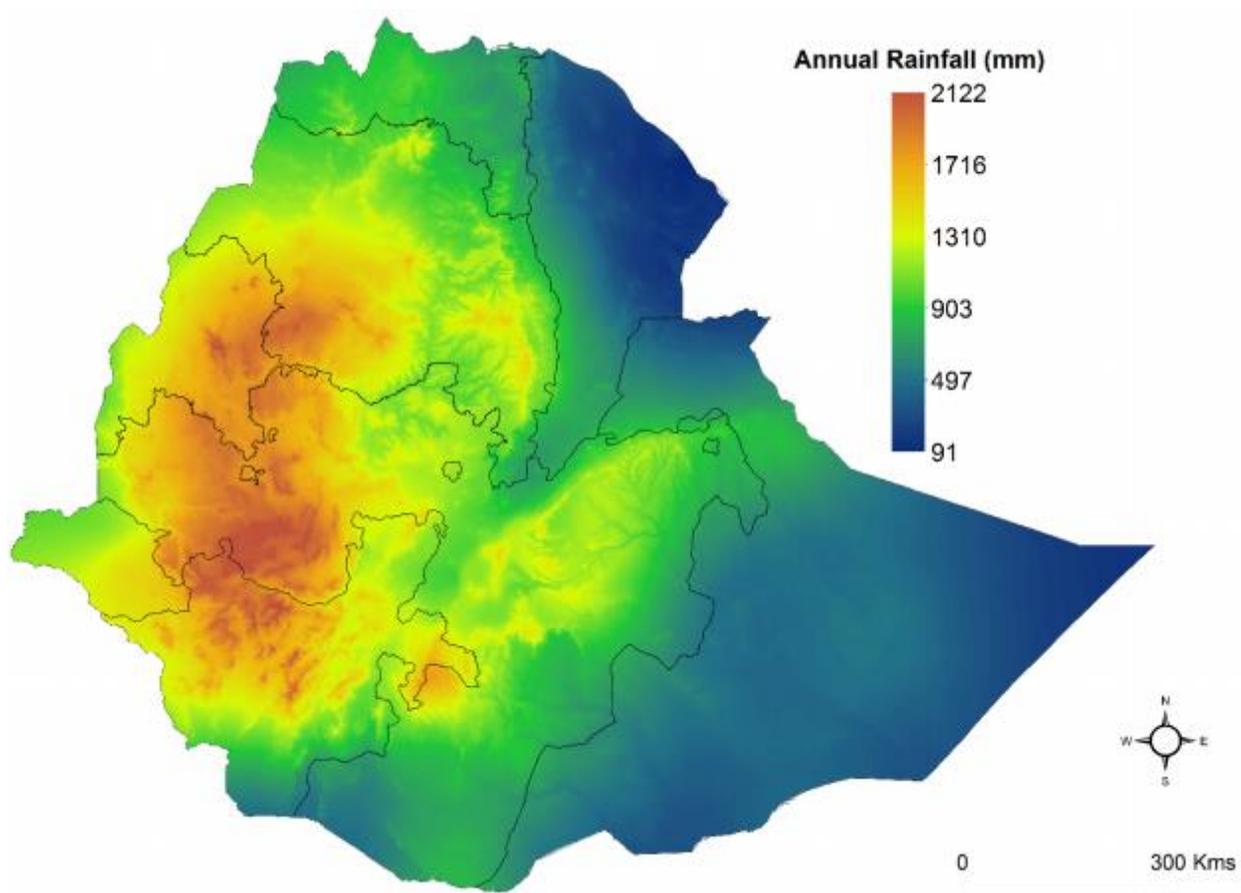


Figure 12: Mean Annual Precipitation

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).

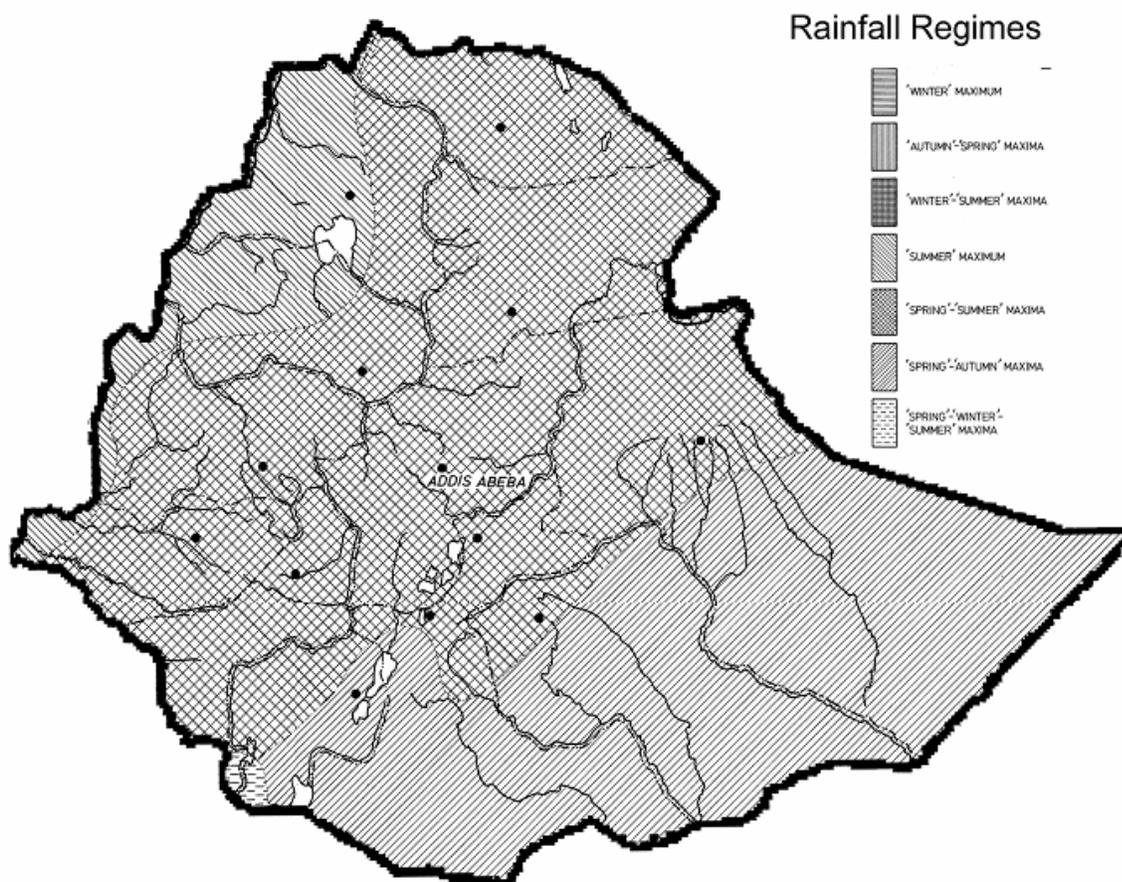


Figure 13: Rainfall Regimes  
Modified source: Ethiopian Mapping Authority Services, 1988

#### 4.9 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 hectares.

Table 8: 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

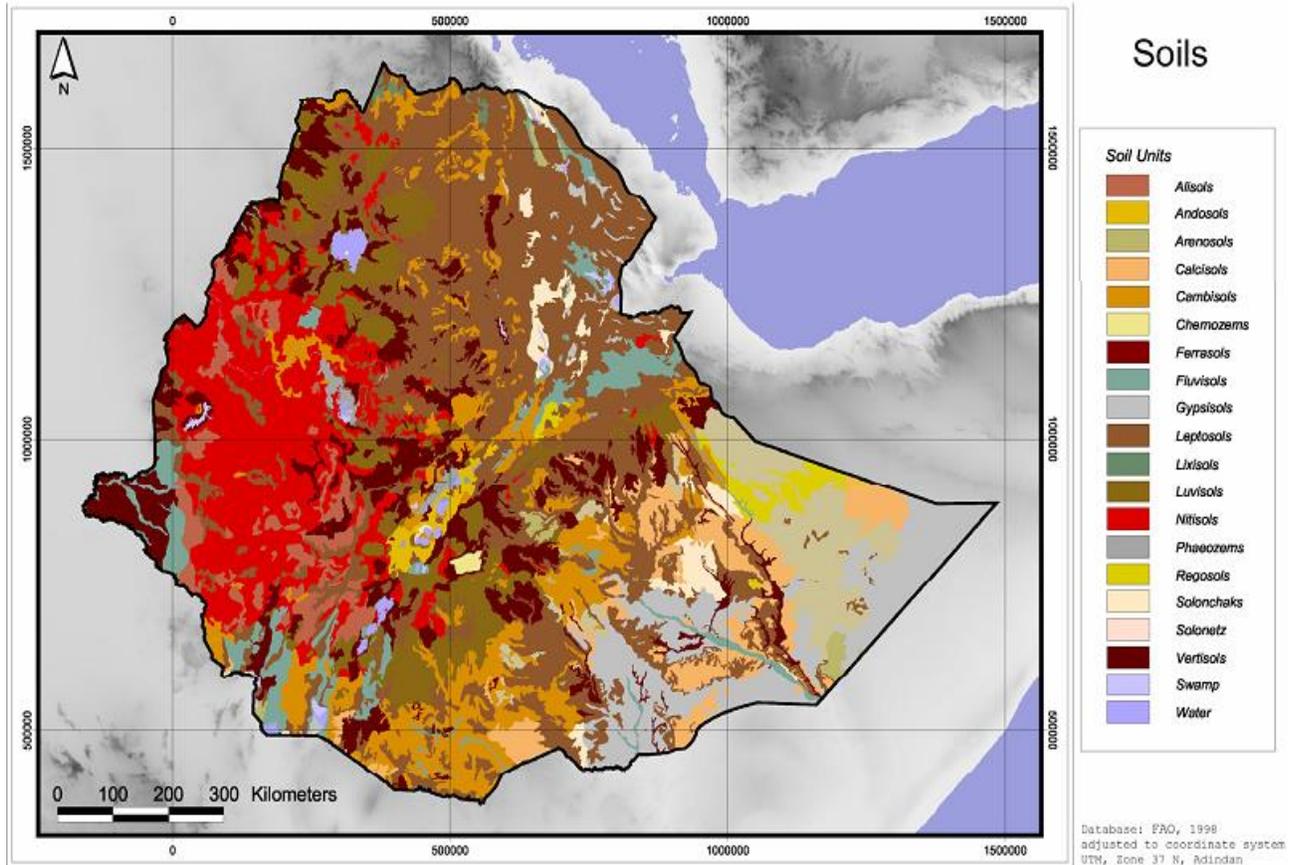


Figure 14: Soils Types of Ethiopia  
Source: FAO, 1998

## 4.10 Water Resources

### 4.10.1. 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 9: 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	<b>2,583,000</b>

Source: Aberra Mekonen and Deksios Tarekegne (2001)

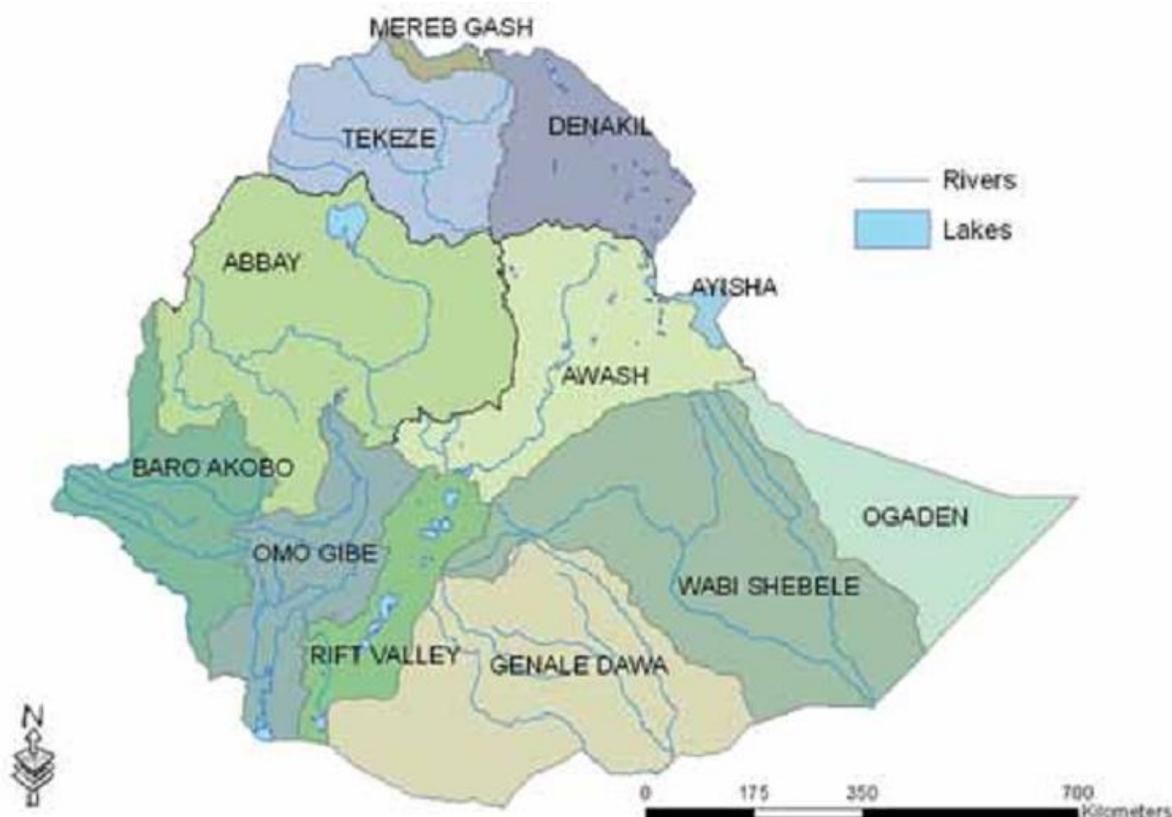


Figure 15: River Basin Map of Ethiopia

Source: Sileshi Bekele, et.al. 2007

#### 4.10.2. 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 m<sup>3</sup> infiltrates into the groundwater system of which 50 percent could be extractable.

### 4.10.3. 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.

Table 10: 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

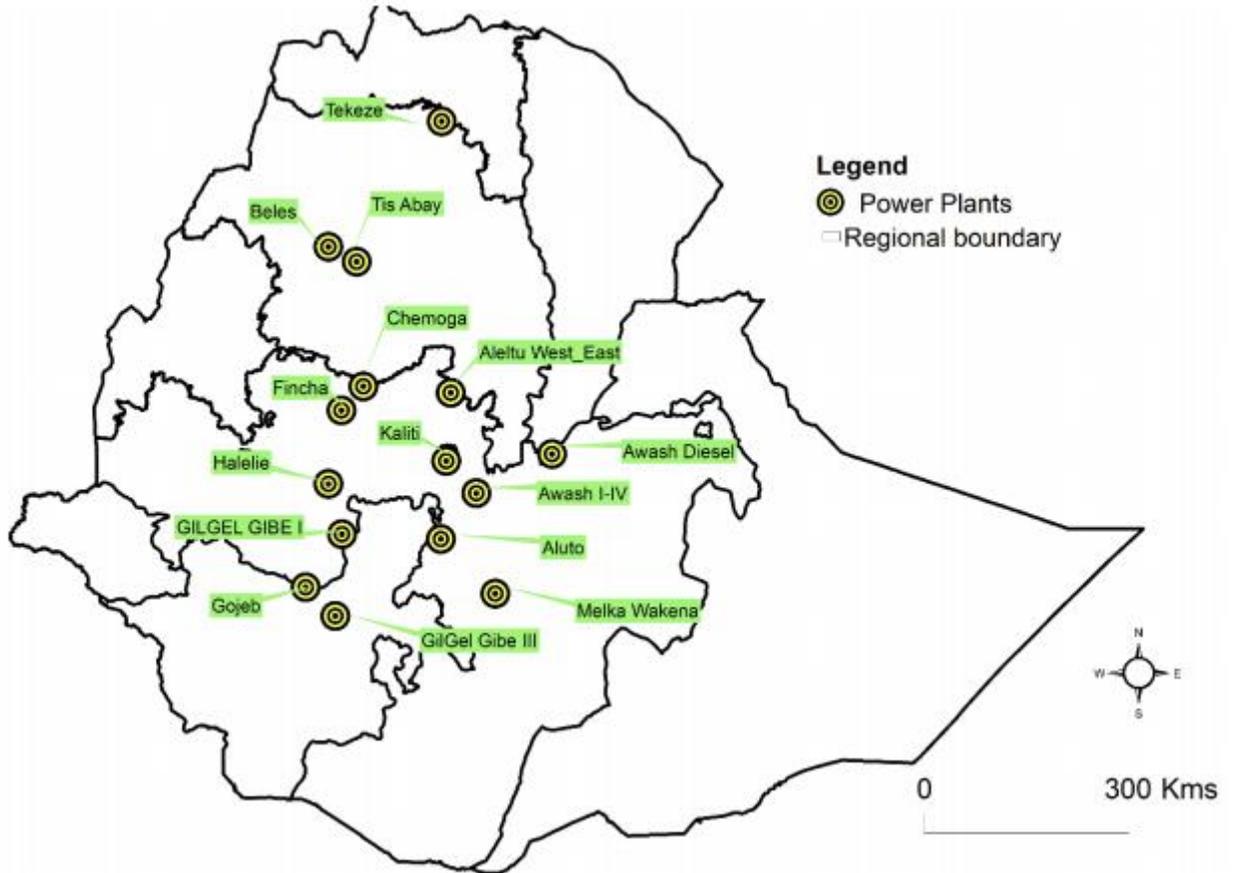


Figure 16: Hydropower Generating Stations of Ethiopia

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

#### 4.11 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.

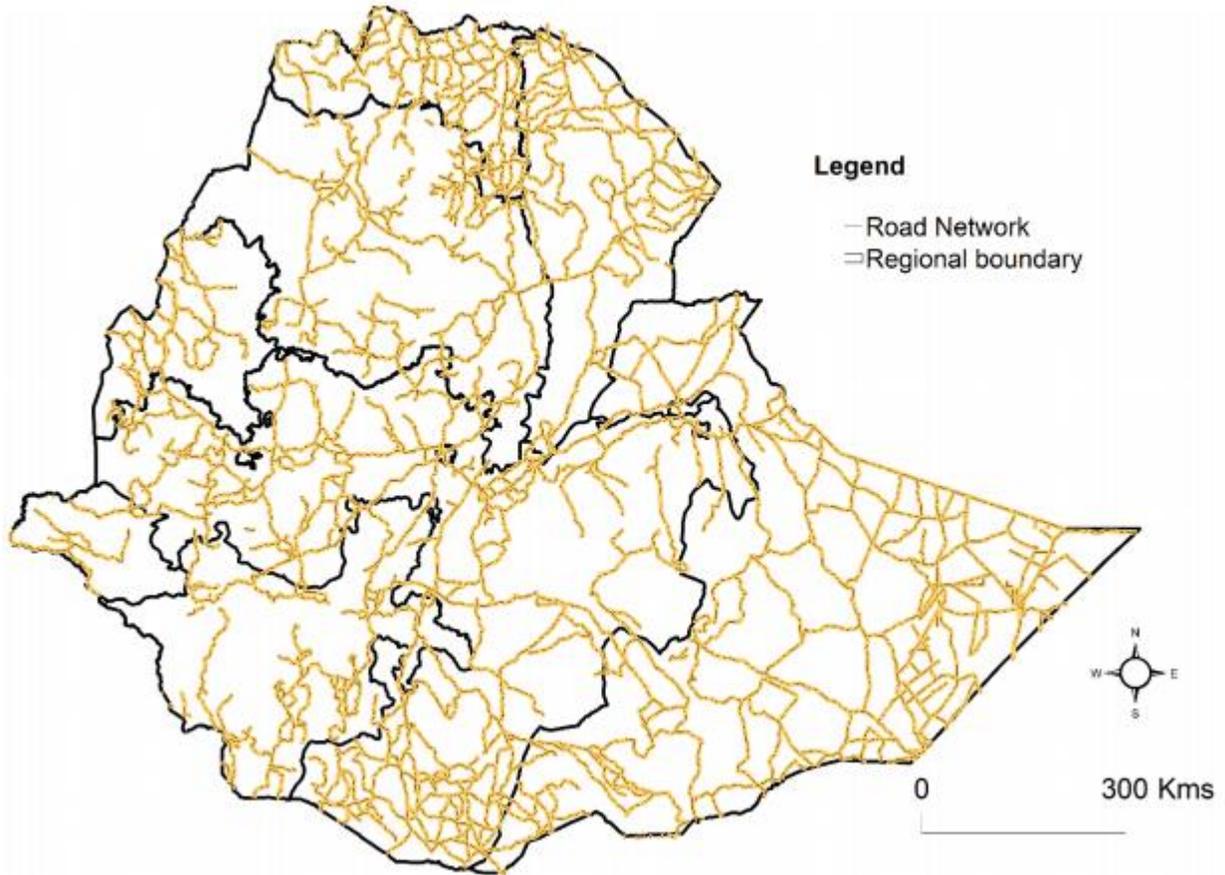


Figure 17: Road Network of Ethiopia

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

## 5. Stakeholder Identification and Analysis Process

### 5.1 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.

Identifying and bringing relevant stakeholders on board is considered as prime and crucial for the REDD+ process implementation. 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 feedbacks of the MEFCC 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.

### 5.2 Objectives of the Stakeholder Analysis

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

- To 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
- To capture the important concerns and interests of the key stakeholders in the REDD+ implementation process.

### 5.3 Procedures of Stakeholder Analysis

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

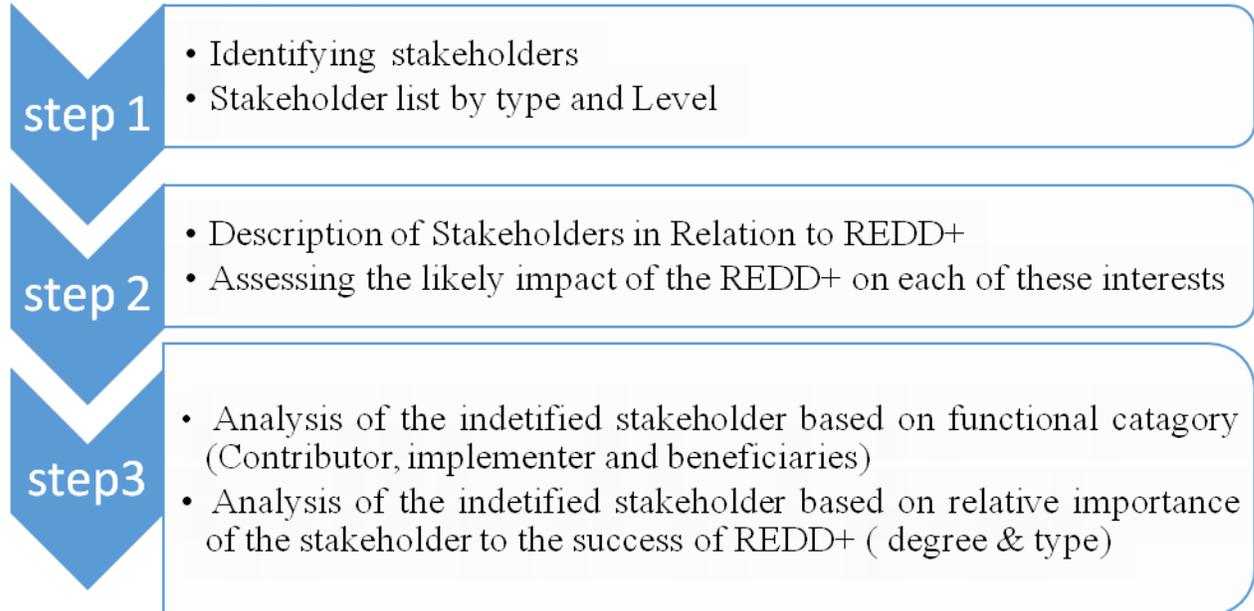


Figure 18: Steps for Stakeholder Analysis

### 5.4 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 & 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.

Table 11: Identified Stakeholders

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 terms of capacity building from REDD+ process.
	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 & social assessment on agricultural investment, contribute to the coordination of REDD+ efforts through its programs (such as the large-scale flagship AGP, PSNP, SLMP operations financed by the World bank and a large range of development partners)
	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 saving technologies such as cook stoves.
	Government Organization	Ethiopian Investment Agency	Involve in the preparation of investment policy and harmonization of it with other policies such as in agriculture, and issuance of investment license in forestry investment
	Government Organization	The Ethiopian Roads Authority	Involves in the identification of impacts of major roads on forests and prepares EIA for such projects to avoid negative impacts
	Government Organization	Ministry of Women, Youth and Children's Affairs	Involve in the Coordination of Women and Youth Association in the country. Women and children benefit from the implementation REDD+
	Government Organization	Ministry of Federal Affairs and Pastoralist Area Development	It is mandated to coordinate the development activities in underserved regions (developing regional states) and it involves in solving conflicts on natural resource between regions if conflict arises
	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 Protected areas
	Parliament	Natural Resource and Environmental Affairs Standing Committee	Appeal REDD+ issues in the parliament. Support the implementation of REDD+ process
	Government Organization	The Judiciary	Involve in the implementation of forest laws and improvement or amendment of the enforcement mechanisms (regulations, guidelines, etc.).
	Government	Ethiopia Biodiversity Institute (EBI)	Provide technical support for REDD+ implementation

SESA report for the implementation of REDD+ in Ethiopia

Level	Type	Stakeholders	Description of Stakeholders in Relation to REDD+
	Organization	(IBC)	and conservation of biodiversity is enhanced through the implementation
	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 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 be only from managed and legal sources
Regional Level	Enterprise	Oromia Forest and Wildlife Enterprise (OFWE)	Manage forests in Oromia Region, host the REDD+ Coordination unit of the region, implementation of REDD+ increase forest cover in the region.
	Enterprise	Amhara Forest Enterprise	Manage forests in Amhara Region, host the REDD+ Coordination unit of the region, implementation of REDD+ increase forest cover in the region
	Government Organization	Regional Agriculture Bureau	Involve in the Promotion of Agricultural Productivity
	Government Organization	Regional Rural Land Administration and Environmental Protection Bureau	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 regional level. Women and children benefit from the implementation
	Government Organization	Regional Cooperative Promotion Bureau	Prepare cooperative guidelines, provide technical support during forest cooperative establishment, issue legal cooperative certificate and approve bylaws,
Woreda Level	Government Organization	Woreda Administration	Coordinate Woreda Offices
	Government Organization	Woreda Agriculture Office	Involve in promotion of agricultural productivity and environmental & social assessment on agricultural investment.
	Government Organization	Woreda Land Administration and Environmental Protection 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

Level	Type	Stakeholders	Description of Stakeholders in Relation to REDD+
			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 solar power).
<b>Kebele</b>	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 grassroots level and share benefits from the forest resources and participate in the management and protection of the forests
International	Development Partners	Multilateral Development Partners World Bank, UNDP	Provide financial and technical support for the implementation of the REDD+ process
	Development Partners	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+

## 5.5 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.

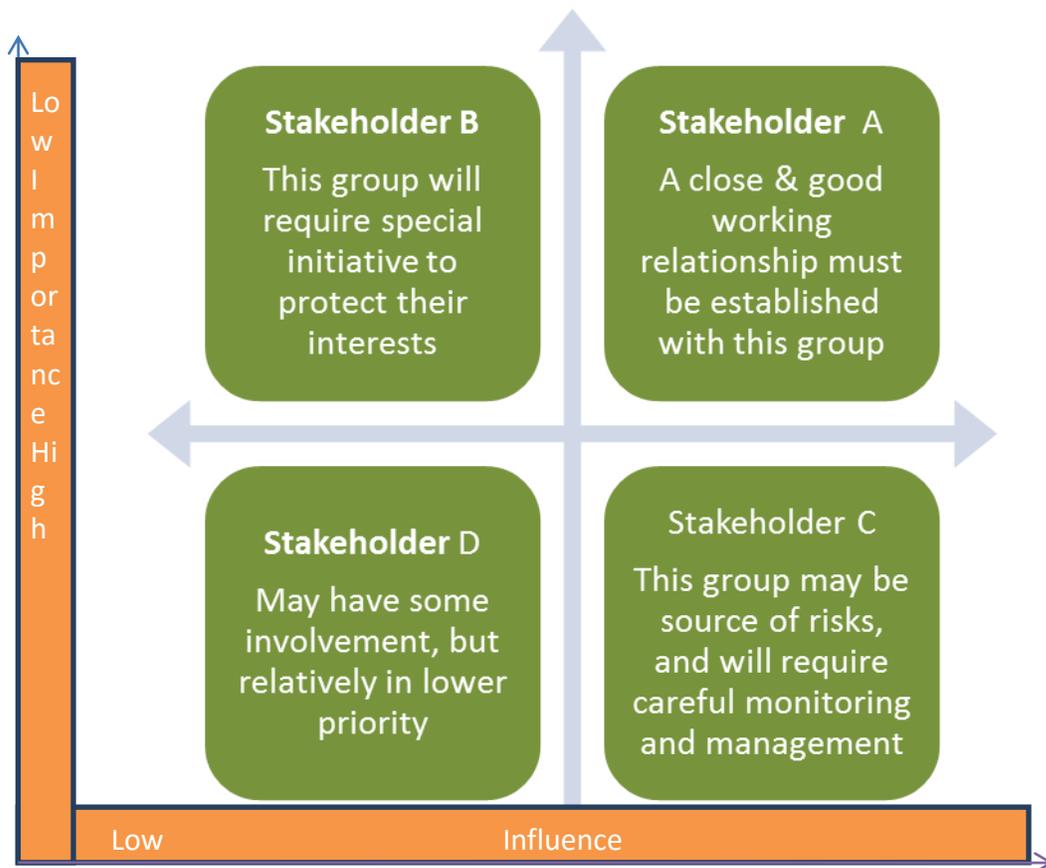
The identified stakeholders are further analyzed and categorized based on degree of influence and importance in REDD+ process and type of stake. Stakeholders who have significant power of influence to determine the direction and outcomes of the REDD+ process are regarded as key stakeholders. Stakeholders 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 12: Stakeholder prioritization

Level	Stakeholders	Analysis Based on functional role	Analysis Based on degree and type of stake, & category
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 and Pastoralist Area Development	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 Biodiversity Institute (EBI) (IBC)	Contributor and beneficiary	Secondary, Category B
	Ethiopian Institute of Agricultural	Contributor	Secondary, Category B

Level	Stakeholders	Analysis Based on functional role	Analysis Based on degree and type of stake, & category
	Research (EIAR)		
	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	Oromia Forest and Wildlife Enterprise (OFWE)	Implementer and beneficiary	Primary and key, Category A
	Amhara Forest Enterprise		
	Regional Agriculture 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 and Environmental Protection 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 (Vitlteria paradoxa), Hunters, Fishers, Fuel wood collectors, WABUB-, WAJIB	Implementer, contributor and beneficiary	Primary and Key, Negatively affected, Category A
International Organizations	<b>Multilateral Development Partners</b> World Bank, UN	Contributor	Primary and Key, Category A
	<b>Bilateral Development Partners</b> 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

Level	Stakeholders	Analysis Based on functional role	Analysis Based on degree and type of stake, & category
Religious institutions	Churches, mosque	Contributor	Secondary, Category C
Traditional institutions	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, Ethiopian Society of Sociologists, Social Workers and Anthropologists	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

## 5.6 Summary of Stakeholders Consultations

Consultations were carried out with different stakeholders at different levels (i.e. National, Regional, Woreda, Kebele and community) during the preparation of this safeguard instruments. The consultation aimed at gaining good knowledge of the environmental and social issues/risks associated with the implementation of REDD+.

Stakeholder consultations and key informant interview were conducted at all levels where as focus group discussions and household interviews were carried out at kebele and community level. 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 consulted. See Annexes 3 to 6 for further information.

The consultation was believed to promote community ownership of REDD+, enhance sustainability and seek their board support for REDD+ implementation at national, regional, woreda and community level. Moreover, to provide opportunity for forest dependent communities' engagement in REDD+ process while avoiding risks and possible conflicts. The consultations will remain open as an ongoing exercise throughout REDD+ activities implementation in the country.

The consultation and participation carried out at different level follow free, prior and informed consultation procedure. At the end of each consultation at community level the consulting team reaffirm the findings captured on the minute have their broad support.

During the Community consultation various aspects of the REDD+, risks and benefits of REDD+ strategic options to address deforestation and forest degradation, local conflict resolution mechanism related to natural resource utilization and other social conflicts, identification of vulnerable groups within the community and other related issues were discussed and the findings of the consultations were included in different sections of the document and understanding, concern and recommendation of the local communities are summarized below.

### 5.6.1 Local community awareness and understanding on REDD+ process

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

### 5.6.2 Concerns raised during the consultation

- Because of the increasing population pressure in the country there are frequent encroachments by human beings that result in destruction of forest. As a result of intensive human pressure most of the faunal and floral resources are now at risk.
- Ever increasing scarcity of land resources for agricultural practices in the country as a whole has escalated the problem of encroachment for cultivation, grazing and settlement in and around the forest area.
- Once under implementation, REDD+ should not follow the historical trend of inadequate public participation in the process of demarcation, zoning and managing of designated government owned regional forests
- 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 almost all forest area of the country.
- The majority of the population in the country largely depend on biomass for their energy needs which is one of the factors that put pressure on the existing forest coverage.
- There is a concern that investment in some regions 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.
- Large scale agricultural investment for sesame and cotton farming and dwellers inside the forest expand their farm land. Moreover, the key informants and the consultation participants explained that *Boswellia Papriffera*, a plant species used for frankincense extraction, is under severe threat because of technical inefficiency during tapping for the extraction of frankincense. *Dalbergia melanoxyton* is also under threat as it is smuggled to Galabat (Sudan).
- In most of the forest area of the country the livelihoods of the people are closely linked to the forests that provide a range of benefits for energy and construction materials, grazing and sources of foods (edible fruits). Moreover, the information indicated that the livelihoods of forest dependent communities rely on non- timber forest product (NTFP).
- Forest dependent community such as (Menja and Mejenger) indicated that their lives are so tied to the forest and any interference against the practice will disrupt the social system of the community. They acknowledged PFM as a good forest management practice and hoped REDD+ projects will also follow the same in valuing their attachments to the forest.
- Underserved, vulnerable groups and the landless having impoverished families and small plots of land have little livelihood alternative to support their families.

- Except some woredas in Gamballa and BGRS in almost all sample words the usage of improved agricultural practices like fertilizer, improved seed, sowing in lines is implemented. The major problems encountered in using these inputs are the high cost of improved seed and fertilizers. There is also problem to accept and adapt to new technology by the community.
- 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.
- ‘Illegally’ occupying forest lands, clearing and cultivating are being practiced by individuals within the region or those coming from outside of the respective region.
- PFM as a forest management approach is found to be a good approach because it made forest dependent community involve in the PFM process and gave the benefit accrued from the resource. However, community members in some regions stressed lack of sufficient consultation and awareness creation on the basics of PFM with the broader community during the initiation of PFMs causing conflicts with villagers who are non-PFM members on benefit sharing, use and access right.
- In the forest area of the country particularly in the dry season the incidences of forest fire occurrence are high and this highly affect the forest resource. On the other hand, there is no forest fire protection system in the country.
- In Oromia, SNNP, Somali, Afar and Tigray regions the traditional and cultural system for the protection, management, and proper utilization of the natural resources including grazing lands is very important and should be considered at all cycles of the REDD+ implementation.
- Strengthening and proper utilization of local institutions of natural resource access, use and conflict resolution would increase the viability of broader national and regional states' REDD+ interventions.
- In Somali, Afar and other low land parts of the country; erratic rain fall and water scarcity are the major challenges. This in turn will affect the implementation of the REDD+ program and projects.
- 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.
- The government's mega projects (such as sugar cane plantation and fertilizer factories, hydropower projects and mining) are identified as threats.
- In some woredas of Amhara region (for example, Metema areas) there are conflicts between the local communities and the pastoralists, locally called “*Mofer-Zemet*”, on the use of the forest resources.
- Absence of forest fire management and prevention facilities.
- Generally, all stakeholders including the local communities suggested mitigation options of climate change through REDD+ intervention; such as, PFM, afforestation/reforestation, introducing alternative energy sources, climate smart agriculture, improving livelihoods through agro forestry as prime mechanism.

### 5.6.3 Recommendation

- 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 country.
- The key informants mentioned that REDD+ needs to respect and exploit the indigenous knowledge on conserving the natural forest.
- REDD+ should give emphases first on rescuing of existing forests in the regions through integrated and participatory forest management system and also active engagement of the local community by equitable benefit sharing from the income generated from the forest resource.
- Consulted experts explained that REDD+ needs to collaborate with existing initiative working on forest resource management of the regions. The existing initiatives 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.
- Overcoming the deforestation and forest degradation problems through (i) the ongoing lessons obtained from PFM arrangements which engage local community on forest resources management and (ii) developing equitable benefit sharing mechanisms.
- Establishment of PFMs should consider continuous community consultation and 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.
- PFMs should support livelihood of the forest dependent community such as diversification of land use through agro-forestry practices and in coffee growing area promotion of sustainable forest coffee production,
- In areas where there is PFM interventions; the PFM cooperatives should plan to involve in alternative income generation activities (such as production of improved stove, poultry, goat and sheep rearing and oxen fattening).
- In areas where there is little or no PFM interventions; to maintain the remaining forest and rehabilitate degraded areas, forest conservation initiatives such as PFM, NTFP cooperatives, should be initiated either by government or the local NGOs.
- During Focus group discussions, in some SNNP Woredas indicated that the major sources of conflict in PFM arose usually at the beginning of PFM implementation due to problems of benefit sharing mechanism. They also suggested that equal sharing of forest resources will help conflict not to be arise over forest resources utilization.
- Gum and raisin tree species are dominantly found in Tigray and Benishangul-Gumuz regions which is creating income to the local community. If it is properly managed to generate more income and help to conserve the forest resource of the regions.
- The participants in the consultation suggested that addressing forest resource use right, promoting proper land use plan, and installing fire management and control mechanism are the primary issue to implement and achieve REDD+ goals.
- There were and are large numbers of refugees from South Sudan migrated and being migrating to Gamballa region and BGRS. The migrants totally rely on the forest resources. They cleared forests to make shelters, get construction materials and fuel wood mentioned as

the major causes 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 with alternatives for construction of shelter and fuel wood uses.

- Most Farmers in Gambella and BGRS 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 during shifting cultivation.
- In some regions and woredas to overcome the water scarcity problem, enhance the traditional water harvesting practices. This might be one entry strategy for the REDD+, supporting these local efforts and providing other possible alternatives to address the problem.
- The social structure in Somali region is used for almost all social, cultural and resource management system. Any member of the community strongly respects the rules and regulations of the clan leaders. Thus, in such social system 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.

## 6. Environmental and Social Situation of Ethiopia

### 6.1 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.

### 6.2 Environmental Situation of the Forest Sector of Ethiopia

#### 6.1.1 Historical Perspectives of Forest resources of Ethiopia

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 15.3 % (Table 14 and Figure 18). The figure 15.3 % forest cover is What MEFCO has communicated as official forest cover of the country to the UNFCCC in 2015.

Table 13: forest cover of Ethiopia over years

Year	Forest cover (%)	Population (in '000')
1900	40	11,901
1954 <sup>A</sup>	16	17,634
1961	8	21,162
1975	4	27,465
1980 <sup>A</sup>	3.6	38,749
1998 <sup>B</sup>	2.7	61,226
2015 <sup>C</sup>	15.3*	106,312

Sources for Forest Data: <sup>A</sup>Million Bekle (2001); <sup>B</sup>Reusing (1998); <sup>C</sup>MEFCO (2015, unpublished), Source for Population: Jan Lahmeyer, 2004

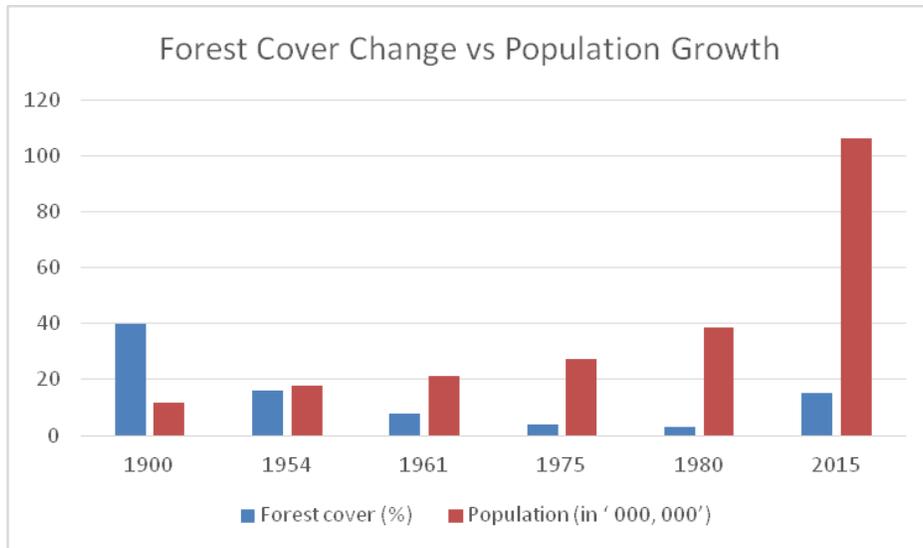


Figure 19: forest cover change vs population growth of Ethiopia

## 6.2.2 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 were 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, 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.

### **6.2.3 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 larger 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 are 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 indicated 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.

#### **6.2.4 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 have 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 eastern 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.

#### **6.2.5 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.

#### **6.2.6 Mining and Deforestations**

Ethiopia is said to have high potential reserve for mineral resources though only few of them are under utilization currently. Unfortunately, those explored so far are found in forest areas.

Laga-Dembi gold and tantalum as well as Yayu coal and potash minings 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 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.

### **6.2.7 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*).

### **6.2.8 Smalls-scale 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 smallscale farmers. Expansion of small-scale agriculture is also one of the major drivers 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.

### **6.2.9 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 forms 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.

#### **6.2.10 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 extractions 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.

#### **6.2.11 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 0.4<sup>0</sup>C every 10 years. The general model predictions also show that the average temperature will rise by about 1<sup>0</sup>C in the next 15 years and by about 2<sup>0</sup>C 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.

#### **6.2.12 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 downstream 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.

### **6.2.13 Urbanization**

Rapid & unplanned urbanization and 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 depend on forest and forest products. Unplanned urbanizations have generally caused forest depletion in Ethiopia during the last century.

### **6.2.14 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 wood lands and shrub lands are adapted to fires and the damage is often reversible. However, in some areas of the lowlands, fires are used 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.

### **6.2.15 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 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 maintenances 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 hectarage 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.

### **6.3 Social Policy of Ethiopia**

The national social policy has been issued in 1994 and it was revised 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 including 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.

Before 1991, Ethiopia's social development endeavors have been guided, coordinated, and implemented solely by the Ministry of Labor and Social Affairs. After 1991, however, the power and responsibility of the Ministry have been limited to providing policy framework and capacity building for the Regional Labor and Social Affairs Bureaus. Since then the Ministry has been doing its level best to discharge its responsibilities and recently issued National Social Protection Policy of the country among others.

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, Benishangul Gumz, 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 Social Protection Policy of the country (MoLSA, 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 different parts of the 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.

A parallel development 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.

Some of the regional states have developed their own guidelines for the implementation of the policy objectives. For instance, the Addis Ababa City Administration Labor and Social Affairs Bureau and the Oromia Regional State Labor and Social Affairs Agency have been making use of the policy in various ways. Accordingly, they have conducted several studies on the causes of social problems in their respective regions and attempting to implement some social welfare programs within their capacity and more importantly coordinating the activities of donors and NGOs.

The Oromia Regional State Labor and Social Affairs, and Public Mobilization Bureau in particular have established Social Development Training Center and have been providing training on community development for the last eight years. The training center is the first of its kind in the country and its graduates have been assigned, as Community Service Workers in all Woredas of the regional state. 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 following main areas of social services:

- Job creation schemes for disabled persons through skill training
- Working on the social aspects of HIV/AIDS
- Prevention of juvenile delinquency
- Design and implement projects on key social problems (e.g., destitute)
- Addressing labor grievances
- Addressing the equality of women through gender mainstreaming
- Expanding recreational and sport facilities for the youth
- Rehabilitation of war displaced persons
- Recruiting people for the national defense force

- Promote the establishment of voluntary cooperatives and building their capacity

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. 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.

#### **6.4 National Policy on Ethiopian Women**

The National Policy on Ethiopian Women was formulated in 1993 by the then Women's Affairs Office (WAO). The Policy has mapped out the problems of Ethiopian women in all fields of development and identified the patriarchal system as the root cause that exposed women to political, economic and social discrimination which is reinforced by traditional practices that give credence to cultural/religious norms and values over women's human rights.

The objectives of the policy include:

- Creating and facilitating conditions for equality between men and women;
- Creating conditions to make rural women beneficiaries of social services like education and health; and eliminating stereotypes, and discriminatory perception and practices that constrain the equality of women.
- Create appropriate structures within government offices and institutions to establish equitable and gender-sensitive public policies.

The structures of the national machinery to address gender equality and equity issues were clearly laid down in the Policy (TGE, 1993).

#### **6.5 General Social Situation of Ethiopia**

The Government of Ethiopia in its Constitution declared principles of revolutionary democracy, based on the twin pillars: respect for diverse collective identities (nationalities); and for individual rights (citizens). Under the Constitution, the government 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.

### **6.5.1 Social Development**

A social development includes different aspects of engagement by the governing body, from formulating policy frameworks to strategies to tackle the social problems. Social problems are byproducts of the economic, political, social and cultural systems of the society. Different Ethiopian governments had/have different social development policies and strategies based on the urgency of the problems and the prevailing governing body political will. Currently the National Social Protection Policy and Strategy of Ethiopia addressed different social issues, such as gender inequality, street children, labor migration, unemployment, landlessness in the rural areas, protection and care for elderly, eradication of harmful traditional practices and illiteracies. The expansion of education and health services, poverty reduction programs such as micro financial and credit services, small businesses, in the country positively affected the socially marginalized groups and the poor. In principle every child has access to elementary level education including education in mother tongues and every mother has access to reproductive health services.

The country has made significant developments in the health sector. The progress made during the past decade is quite good. The number of health posts, health centers and public hospitals are increased. Over 33,000 health extension workers were trained and deployed in the rural areas (FDRE, GTP-II). In this sector the UNDP Human Development Index (HDI) has also improved over the past decade (UNDP, HDR 2015).

During the last decade the percentage of women who get reproductive health care has increased. Similarly, youth empowerment and adolescent reproductive health is also on top of the agenda, and various interventions and plans are in place. Moreover, due to the increase in health service coverage and public awareness infant, child under-five mortality rate has declined and the HIV prevalence rate dropped. Gender equality and women empowerment have also recorded progress.

The government developed the Education and Training Policy in 1994, and launched the Education Sector Development Programme (ESDP) in 1996/7. Over the past decade ESDP-I-IV (each ESDP five year) implementation signaled commendable achievements in the education sector. The number of public universities has increased from 2 to 22 and is expected to reach 33 when new universities under construction are completed. The public Technical and Vocational Education Training (TVET) colleges reached 253, while the number of primary schools increased dramatically as a result primary school gross enrollment rates was increased and the disparity in enrollment rates between male and female gross enrollment ratio narrowed.

In Ethiopia, women and children who collectively constitute about 70% of the population are among the most disadvantageous groups. The government made various efforts that have enabled to address concerns of women and children as a priority focus. Such effort includes enacting a constitution that guarantees the rights of women and children, formulation of a

national women's affairs policy with its implementation mechanism- women affairs structure, formulation of a national social welfare development policy which treats women and children as its components.

### **6.5.2 Social Inclusion**

- a) Equal access to public social services, with FDRE obligation to allocate resources to provide to the public health, education and other social services,
- b) Vulnerable groups support and assistance encompass the physically and mentally disabled, the aged, and children who are left without parent or guardian,
- c) Ensure Ethiopian farmers and pastoralists receive fair prices for their products, obtain an equitable share of the national wealth commensurate with their contribution,
- d) Ensure equal rights to women in marriage, addressing harmful customs, eliminate inequality and discrimination provision of affirmative measures in political, social and economic life as well as in public and private institution,
- e) "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 makeup, 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).

### **6.5.3 Gender participation and inclusive development**

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.

The government of Ethiopia 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. Therefore, participation of women in REDD+ initiatives is a constitutional and human right, development right in establishing a socially and culturally inclusive sustainable development.

### **6.5.4 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 participation of women in watershed management which could be related to the gender inequality in the society.

## **6.6 Forest Related Social Situation in Ethiopia**

### **6.6.1 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 caste or ethnic group, and gender concerns are important to consider.

### **6.6.2 Forests and Livelihoods in Ethiopia**

Livelihood can be thought of as the way people make a living. Livelihood 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 copes 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).

In the forestry context, forest or tree resources that the rural poor can freely access might form a critical part of their lives. A primary role of forest resources in the lives of the rural poor is thus as a "safety net", as one of many strategies to avoid falling into destitution (Shimizu, 2006).

In Ethiopia and many African countries, forests are vital for the welfare of millions of people, especially the rural poor and marginalized, and their wise use could improve livelihood and quality of life. Over 2/3 of Ethiopians rely directly or indirectly on forest for their livelihoods, including security. Wood is the primary energy source for at least 90% of households in Ethiopia (CIFOR, 2005).

In some situation forests provide income, in others they act as safety nets for the rural poor. 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 in this country.

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).

### **6.6.3 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 maintenance and that of his 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) of the Constitution notes that: “the right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the state and the peoples of Ethiopia. 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.

Table 14: Land ownership percentage, disaggregated by gender in some regions of Ethiopia

No.	Region	Men (%)	Women (%)
1	Afar	92	8
2	Amhara	83	17
3	Gambella	78	22
4	Oromia	83	17
5	Southern Nation and Nationality	82	10

Source: FEMNET (2001)

#### 6.6.4 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 for further education and training are at insignificant level 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.

### 6.6.5 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 is 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.

To get a clear response to gender issues and design equitable and well informed mitigation policies and institutions, the drivers of deforestation, the legal and political clarity regarding land ownership, carbon rights and land use planning etc. has to be clearly stated. 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 women 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+ programs
- 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.

#### **6.6.6 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.

#### **6.6.7 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.

### 6.6.8 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.

### 6.6.9 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 artificioium* (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.

#### **6.6.10 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 abssynica*, *Dovialis abssyica*, *Balaniitesa egypticus*, *Ziziphus spinachristy*, *Oputia ficusindica* (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.

#### **6.6.11 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.

#### **6.6.12 Forest and Forest Product Uses**

One of the major uses of the forest in Ethiopia is for energy purpose. The household energy requirements of this large and fast growing population are 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 requires balanced on demand and supply in order to it will have impact barely meeting its energy requirements for maintenance.

The consumption of woody biomass for various purposes 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.

#### **6.6.13 Forest and NTFP**

The contribution of non-timber forest products (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.

#### **6.6.14 Settlements within the Forest**

Forests are considered as free, unoccupied area for settlement 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 who came 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 unlike the local people who have been sustainably utilizing the forest resources for generations. 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 conducted as per the principles and procedures agreed in the complementary National REDD+ Implementation RPF.

## 7. Forest Governance

Before the beginning of modern forms of forest governance spearheaded by the state, there were different indigenous institutions in different regions of the country. The indigenous institutions for the forest governance are fundamentally related to the traditional religious institutions. On the other hand, as historical records show, the first modern form of forest governance was tried by the Italians who issued various forest laws and regulations even though they were forced to leave the country before implementing it (Melaku Bekele, 2003). In spite of this the first comprehensive and modern forest legislation was ratified in 1965 during Emperor Haile Silassie-I. The proclamation focused mainly on determining the forest ownership rights, as the state owned, private owned and the protected forests. The institutional responsibility was given to the Ministry of agriculture with mandate to issue regulations regarding management, protection and utilization of the state and private forests, the establishment of community forests and the processing and manufacture of forest products. As the depletion of forests worsened through time the regulative measures did not do much to forsake forests in the country. Under the Derg all the public resources were nationalized through different proclamations which redefined the property ownership in the country. To this end the government repealed the 1965 proclamation and issued Forest and Wild Life Conservation and Development Proclamation, no. 192/1980; which recognized three forms of forest ownership, as the state, peasant associations and urban dwellers association. Despite the repeal the 1980 proclamation maintained some of the regulations from the 1965 proclamation with regards to protection and exploitation of state forests, provisions to rangers and forest guards, regulation in processing forest products and manufacturing enterprises. Even though the period was characterized by a strong emphasis on the production of forest due to fuel wood crisis and the increase in the price of fossil fuels, it was also known for the increased coverage of forest due to the involvement of associations. However, the communally owned forests suffered from the syndrome of the “tragedy of Commons” due to pseudo- community participation and top down approaches to the forest management (Alemayehu Negassa, 2014). After the fall of the Derg the transitional government issued new proclamation, no. 94/1994, entitled Conservation, Development and Utilization and recognized three forms forest ownership, as the state, regional and private. It emphasized on community participation, transparent and equitable use of resources. To this end the Ethiopian Forestry Action Program (EFAP) was established to provide over all guidance to forest development, conservation and utilization, to ensure the sustainability of forest. Recently in the year, 2007 new proclamation (no. 542/2007) and the first National forest sector policy and strategy are ratified and operational at the present. However, the impacts of forest policies and strategies in ensuring sound forest governance on the ground is difficult to prove due to the complex social, political and economic interests networked around forest utilization.

## 7.1 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 task 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.

Decentralization of forest governance has advantages over non-decentralized systems. By their nature, federal countries have a decentralized organization as compared to the non-decentralized countries and this has made forest governance in federal countries to engage more local participation in decision making.

This chapter provides an overview of the historical background of the forest governance dynamics in Ethiopia. It highlights a general outline of the policy and legislative frameworks of the forest sector. It further assesses forest and environment related governance tools in terms of their emphasis on local people participation, use right, benefit sharing and safeguard issues. Adequate emphasis has also been provided to international conventions, signatories and pledges. Other sectors' policies have also been examined with the aim of detecting possible inter-sectorial linkages that have to be enhanced to ensure forest governance that safeguards community rights of benefiting from ecosystem services including carbon trade and protecting their right of living in a healthy environment.

## 7.2 Historical Perspectives of Forest Governance in Ethiopia

Though modern type of sectoral policies is 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 19<sup>th</sup> 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 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). The Derg regime recognized forest ownerships by state, peasant associations and urban dwellers' associations. 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.

### **7.3 Land Tenure, Carbon Rights and Benefit Sharing**

#### **7.3.1 Land Tenure**

In Ethiopia, 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 of all natural resources, is exclusively vested in the State and in the people of Ethiopia. As a result of this, land is not the subject of sale or other means of exchange. This means that, 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. Therefore, one cannot lay usufruct right 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 peasant 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 peasant 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, peasant 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.<sup>2</sup> 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,

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<sup>2</sup> 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."

landform, weather conditions and plant cover and socioeconomic conditions which are based on a watershed approach.<sup>3</sup>

There are a number of policy and strategic documents in Ethiopia that show the importance of tenure rights for nature conservation and for rural economic development. These include: Rural Development Policies and Strategies of 2001, Environmental Policy of Ethiopia of 2007, The Food Security Strategy of Ethiopia of 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 enforceability is in place, to control further encroachment of forests triggered by additional income from land investments.

### **7.3.2 Carbon Rights**

REDD+ is a framework that encourages countries to set up a national entity or designated focal point for REDD+, which will be eligible to receive financing to implement REDD+ activities and strategies. But 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. To date, 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. The carbon trading right of the local people should be clearly defined in law (either by amending the existing laws or by enacting new laws). 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 enacted laws that clearly define 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 required. 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, this implies that the government is the bearer of carbon rights. But this

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<sup>3</sup> 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.

does not preclude benefit sharing for local communities or organized groups through agreements. This was also reflected during the discussions with 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 which is one aspect of the cooperatives establishment process. Thus, the Humbo CDM project might serve as a model for learning benefit sharing lessons.

### **7.3.3 Benefit Sharing**

In a benefit sharing scheme, there are benefits and beneficiaries. There is also a mechanism used for recording the benefit and associated obligations as well as distribution. 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. (Diji Chandrasekharan 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 government, there should be clearly defined benefit sharing mechanism. 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. Accordingly, the National REDD+ consultation and participation plan (C&P) emphasizes various methods/techniques (such as workshop, community consultations, FGD, questionnaire surveys and interviews) for consultation and participation in order to maximize the engagement of stakeholders at different levels. The National REDD+ C&P plan further states the consultation and participation process will continue throughout the REDD+ Activities implementation to incorporate the voices and insights of forest dependent communities into the strategic decision making process of the implementation and avoid the sole decision of professionals. Forest Conservation, Development and Utilization Proclamation No. 542/2007 reinforces the C&P by denoting the need for 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 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 key roles but still face the competitive constraints of the global market.

#### **7.4 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 to 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 gives 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 (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.

## **7.5 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 Proclamation No. 235/2001 which was subsequently repealed and replaced by the Revised Federal Ethics and Anti-Corruption Commission Establishment Proclamation No. 433 of 2005. The government established the Federal Ethics and Anti-Corruption Commission (FEACC) as an independent body which is accountable to the Prime Minister for the purpose of creating a society that no more condones or 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.

## **7.6 Major Forest ownerships and management in Ethiopia**

### **7.6.1 Community-Based Forest Management**

Community forestry has been promoted during the Derg Regime. Several forests have been established during that period. 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.<sup>4</sup> 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.<sup>5</sup> The Proclamation No. 456/2005, the Federal land law, 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.<sup>6</sup> 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 landholding or in a state forest area given to him on concession shall be given assurance to his 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.<sup>7</sup> 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 had different experiences and have found different ways of creating with institutional settings to nurture this participatory way of managing forests.

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<sup>4</sup> 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)).

<sup>5</sup> 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.”

<sup>6</sup> 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.”

<sup>7</sup> Proclamation № 456/2005, Article 2 (12).

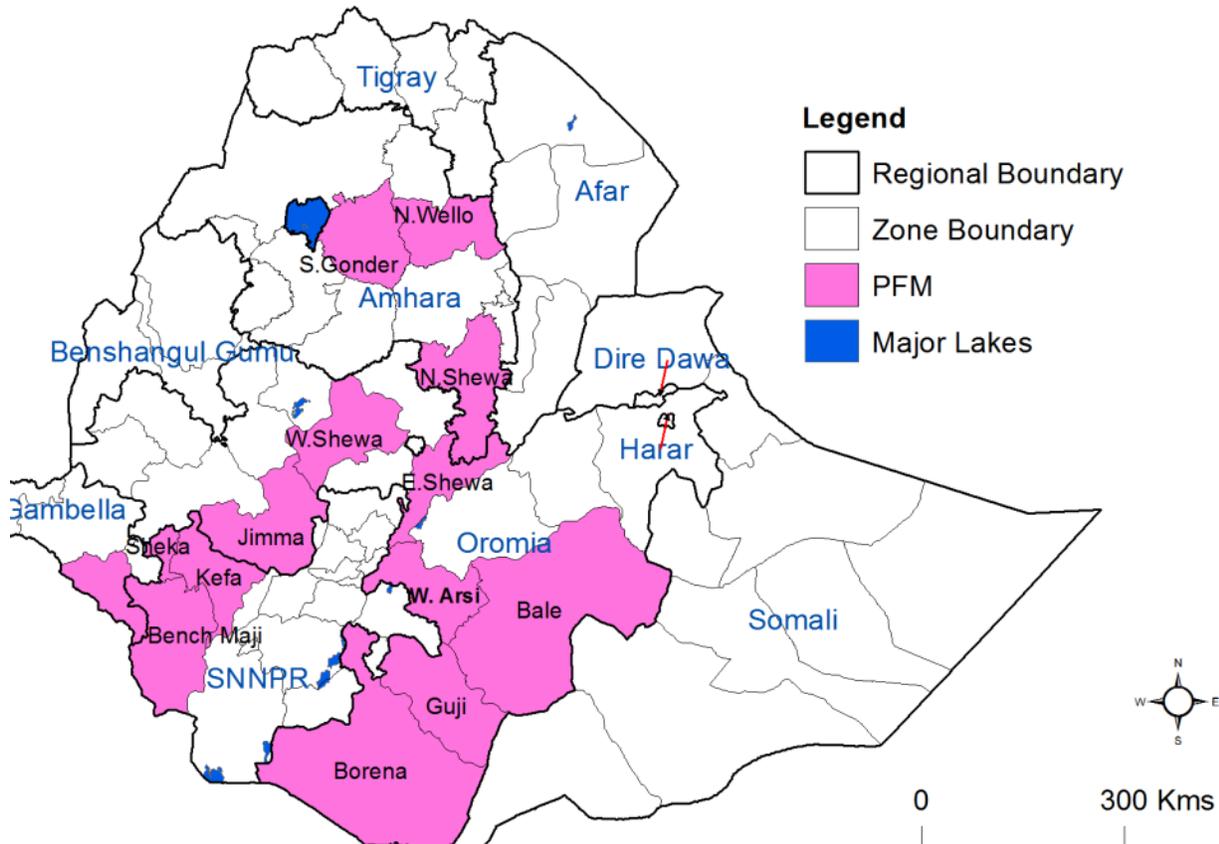


Figure 20: PFM Zones in Ethiopia

### 7.6.2 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 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 other constraint is the absence of regulations and guidelines on allocating land for forestry development. The relevant body (MEFCC) 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.

### **7.6.3 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 Provide for the Establishment of 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. The objective of these enterprises is to ensure the sustainable development of forest resources through the generation of forest revenue and the appropriate use of this revenue for forest resources development and sustainable management. Oromia Forest Enterprise has so far done commendable achievements in production forestry.

On the other hand, the Amhara National Regional 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.

#### **7.6.4 Traditional Forest Management and Resource Use Systems**

Forests owned and/or managed by local communities are facing different challenges from agricultural and other investment projects, increasing population pressure and other problems. 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.

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 underserved communities, 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.

## 8. Legal, Policy and Institutional Framework

### 8.1 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:

#### 8.1.1 United Nations Framework Conventions for Climate Change (UNFCCC)

UNFCCC 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.

#### 8.1.2 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+20conference. *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+.*

### **8.1.3 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 the CBD (Paragraph 13).

COP 11 which took place from 8 to 19 October 2012in 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.

#### **8.1.4 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.

#### **8.1.5 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.

#### **8.1.6 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.

### **8.1.7 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.

## **8.2 National Policies, Strategies, Proclamations and Programs**

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.

### **8.2.1 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 rehabilitating 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 has 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.

### **8.2.2 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 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 provided in this policy 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.

### **8.2.3 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.

### **8.2.4 Environmental Policy of Ethiopia (EPE), 1997**

Currently, MEFC 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. The environmental policy of Ethiopia was 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 of the roles of communities, private investors and the state in forestry development. The policy emphasizes to the need to restricting 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.

### **8.2.5 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.

### **8.2.6 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 has gone through various phases and now the fourth phase is under implementation. 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 an aim of combating land degradation problems. It was envisioned to contribute to the UNCCD and global action against climate change. The SLM project aims at reducing land degradation and improving 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.

### **8.2.7 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 development.

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 (MEFCC) 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 MEFCC - intends to serve as a vehicle through which the CRGE objectives on land use and forestry sector are achieved. The CRGE Strategy is closely related with the GTP.

### **8.2.8 Climate Resilience Strategy for Agriculture and Forestry 2015**

The Climate resilience strategy for agriculture and forestry is designed to address the impacts of weather variability and future climate change in crop, livestock and forestry sectors. It has three main objectives: to identify the impacts of current weather variability and projected future climate change on Ethiopia; to identify best scenarios or options to build resilience and reduce the impacts at the same time quantifying the cost; and to map the steps needed to finance and implement efforts to build climate resilience. The strategy supplements the green economy strategy by enhancing the recommendations for resilience. The first phase of the strategy focuses on the agriculture sector, i.e., agricultural crops, livestock, forestry and disaster prevention. The strategy is also aligned with the existing strategy of the Ministry of Agriculture and the governance structure. REDD+ will be a vehicle for building resilience through improving the forest cover and maximizing ecosystem services in agricultural landscapes.

### **8.2.9 Climate Resilience Strategy for Water and Energy**

The water and energy sectors have key role in meeting the GTP2 goals. Given their importance, the Climate Resilience Strategy for Water and Energy has three main objectives: to identify the economic and social impacts of current climate variability and future climate change on water and energy in Ethiopia; to identify priority ways that the water and energy sectors can build climate resilience and reduce the impact of climate variability and climate change; and to map the necessary steps to finance and implement measures in the water and energy sectors to build climate resilience in Ethiopia and deliver an integrated Climate Resilient Green Economy.

### 8.3 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 administering 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:

#### 8.3.1 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)

#### 8.3.2 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)

#### 8.3.3 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.

### **8.3.4 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

### **8.4 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 1993. 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 MoANR. 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 MEFCC in 2013. It can be said that MEFCC is now an institution with adequate institutional setup to run the sector in such a way that 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 forest sector. 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.

## **8.5 Other Policies and Laws related to REDD+ Implementation**

### **8.5.1 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.

### **8.5.2 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.

### **8.5.3 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.

### **8.5.4 Water Resources Management Policy 1999**

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. 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.

### **8.5.5 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.

### **8.5.6 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 law no. 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+.

### **8.5.7 Rural Land Administration and Land use Proclamation pro No 456/2005)**

The Government of Ethiopia has issued proclamation on rural land administration and land use. The proclamation mainly states about the right to hold and use of rural land, and rural land use restrictions. As per to the proclamation; farmers and pastoralists engaged in agriculture for living shall be given land free of charge. Young people above the age of 18 who want to engage in agriculture also have the right to use rural land. It also recognizes that women have the right to get and use rural land.

The legislation also recognizes that citizens who have the right to use rural land may get rural land from his family by donation, inheritance or from competent authorities. It also brings new initiatives which were not there in the past, such as, certificate of holding to be prepared by competent authority. It also recognizes transfer of land through lease to farmers or investors.

In relation to compensation payment to be made for a holder the proclamation in section two, article 7, no. 3 states that:

*“Holder of rural land who is evicted for purpose of public use shall be given compensation proportional to the development he has made on the land and the property acquired or shall be given substitute land thereon. Where the rural land holder is evicted by the federal government, the rate of compensation would be determined based on the federal land administration law. Where the rural land holder is evicted by their regional governments, the rate of compensation would be determined based on the rural land administration laws of regions”.*

### **8.5.8 National Social Protection Policy of Ethiopia**

The social protection policy of Ethiopia was developed by the Ministry of Labour and Social Affairs in March 26, 2012. It includes issues of pension, aging, support to vulnerable children, nutrition, etc., along with food security. The policy states that focus must be given to vulnerable groups of the society with the notion of including the disabled and the aged. It focuses on households and individuals who should receive social assistance in order to function properly, and achieve quality of living within the society (MoLSA, 2014). The main objective of the policy is described as follows:

- Protect poor and vulnerable individuals, households, and communities from the adverse effects of shocks and destitution;
- Increase the scope of social insurance;
- Increase access to equitable and quality health, education and social welfare services to build human capital thus breaking the intergenerational transmission of poverty;
- Guarantee a minimum level of employment for the long term unemployed and under-employed;
- Enhance the social status and progressively realize the social and economic rights of the excluded and marginalized;
- Ensure the different levels of society are taking appropriate responsibility for the implementation of social protection policy.

### 8.5.9 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 be 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 polices, 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 NO.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 deducing her wages. The entitlement for affirmative actions and maternity leave for civil servant women is covered by the civil servant proclamation NO.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.

#### **8.5.10 World Bank Safeguard Policies**

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/BP 4.37 Safety of Dams: The REDD+ strategic options include establishment of small dams for improving agricultural production and reducing extensive agriculture, which increases deforestation. Thus, OP 4.37 is triggered. Under the Bank's definition, small dams constitute those dams having a height of less than 15 meters. Thus, the safe operation of such dams has significant social, economic, and environmental relevance. Safety on Dams requires that experienced and competent professionals design and supervise construction, and that dam safety measures are adopted and implemented through the project cycle.

- 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 "underserved peoples": 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.
- BP 17.50 Consultations and Disclosure requirements: Whenever the Bank requires an environmental assessment (EA) and/or a Resettlement Instrument (RI), the proposed borrower prepares an EA report and/or a RI report as a separate, freestanding document, publicly available to project-affected groups and local NGOs. In the REDD+ project activities, as one of the seven safeguard principles of the Cancun agreement, disclosing information for the public is a requirement.
- BP 4.03 Performance Standards for Private Sector Activities: The Bank screens the Private Sector Activity in order to determine the nature and extent of the environmental and social assessment needed, based on the type, location, sensitivity, and scale of the activity, as well as the nature and magnitude of its potential impacts. This screening also identifies any additional information required to complete the Bank's environmental and social review and determine whether to support the activity.

### **8.5.11 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 reforestation 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.

## 9. 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.

### 9.1 Federal Institutions Review

#### 9.1.1 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 MEFCC 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 (MoANR). In July 2013, the National REDD+ Secretariat is transferred into the newly established Ministry of Environment and Forestry (MEFCC). Currently, MEFCC 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.

### **9.1.2 Ministry of Agriculture and Natural Resources**

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+.

### **9.1.3 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.

#### **9.1.4 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 zone.

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 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 was 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 river banks;
- 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.

### **9.1.5 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.

### **9.1.6 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.

### **9.1.7 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.

### **9.1.8 Ethiopian Institution of the Ombudsman (Proclamation No. 211/2000)**

The Ethiopian Institution of Ombudsman is an important structure that supports the Ethiopian human right commission in its effort to promote and protect human right in Ethiopia. It is one of the bodies created in line with the constitution. The Institution of the Ombudsman, along with other democratic institutions is a critical element for its implementation. The establishment of the Institution of the Ombudsman is set out in Article 55(15) of the FDRE Constitution.

The institution is an independent structure established by the parliament. It is a government body that intervenes in individual case or complaints against local or regional or federal state authorities. It helps them solve their disputes and examines their complaints with impartiality. In its effort to prevent maladministration, the institution subscribes to the general effort of human right promotion and protection. By protecting citizens against abuses, the institution helps them have their human right respected.

According to Article 5 of the Institution of Ombudsman Establishment Proclamation No. 211/2000, the objective of the Institution is to bring about good governance that is of high quality, efficient and transparent, and are based on the rule of law, by way of ensuring that citizens' rights and benefits provided for by law are respected by organs of the executive.

## **9.2 Regional and Zonal Government Institutions**

### **9.2.1 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.

### **9.2.2 Regional Agriculture 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 plays significant role during environmental & social assessment large scale agricultural investment.

### **9.2.3 Regional Rural Land Administration and Environmental Protection 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.

### **9.2.4 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).

### **9.2.5 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.

### **9.2.6 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 plays 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 provides 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.

### **9.2.7 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.

### **9.2.8 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.

### **9.2.9 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).

## **9.3 Institutional Review of other REDD+ Stakeholders**

### **9.3.1 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.

### **9.3.2 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 has been cleared. Due to lack of knowledge on significance and value of forests, the road construction activities were 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 MEFCC 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.

### **9.3.3 The Ministry of Federal Affairs and Pastoralist Area Development**

One of the purposes for the establishment of the Ministry of Federal 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.

### **9.3.4 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.

### **9.3.5 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.

### **9.3.6 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 is 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.

### **9.3.7 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.

### **9.3.8 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.

### **9.3.9 Donor Institutions**

#### **9.3.9.1 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 USD 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.

### **9.3.9.2 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.

## **9.4 REDD+ Management Arrangement**

### **9.4.1 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.

#### **9.4.1.1 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 MEFCC, 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.

#### **9.4.1.2 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.

#### **9.4.1.3 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. This three task force are working closely for successful accomplishments of the three REDD readiness millstones.

#### **9.4.1.4 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.

#### **9.4.1.5 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 forest 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.

#### **9.4.1.6 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 (MoANR) 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.

#### **9.4.1.7 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.

### **9.4.2 Regional REDD+ Management Arrangement**

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

## **9.5 Coordination among Ministries**

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

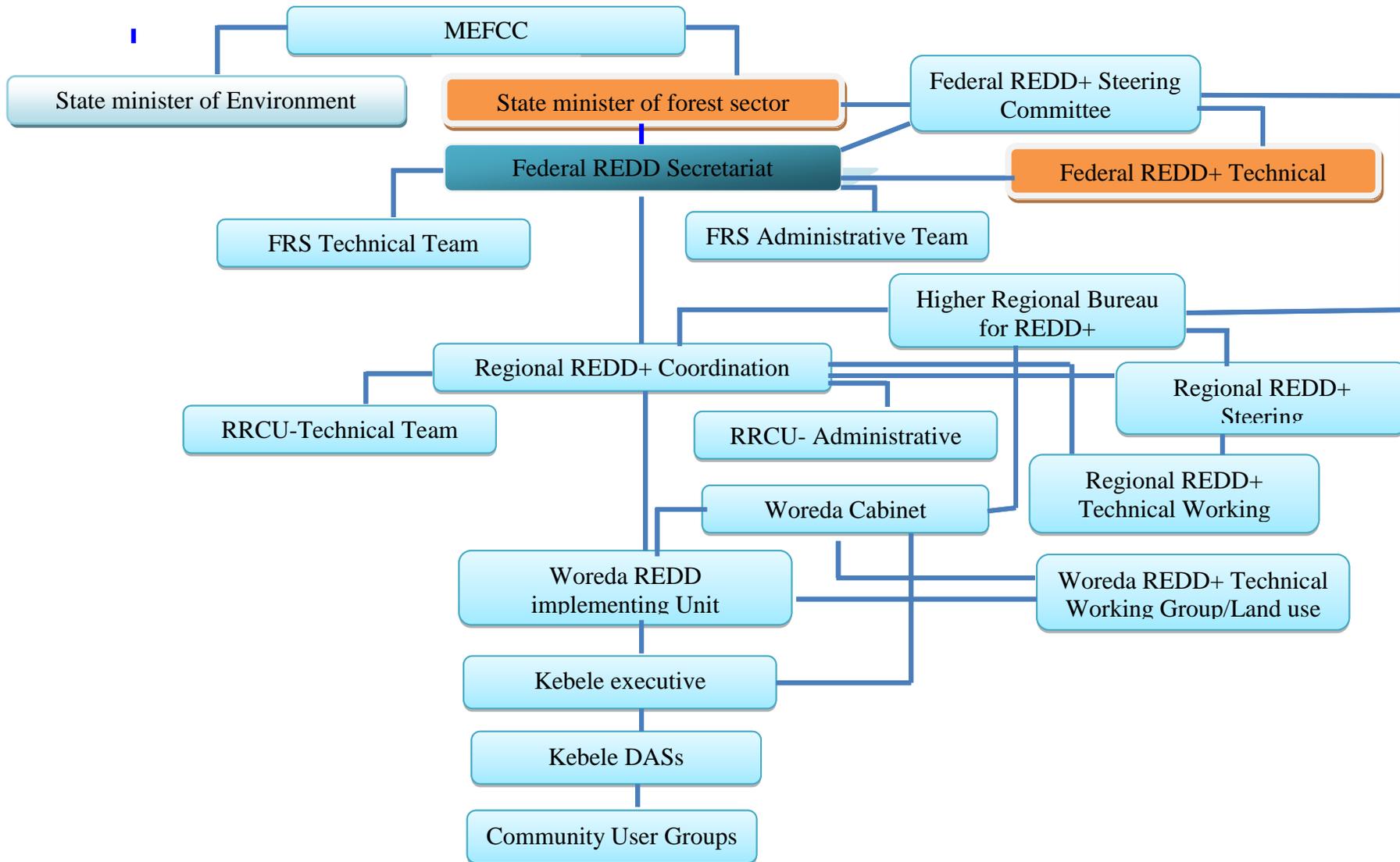
Resilient Green Economy (CRGE) initiatives, which will involve channeling funds towards REDD+ and manages the selling of expected project generated carbon credits. Thus, the two ministries need to have strong coordination for the successful accomplishment of the REDD+ process.

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 Ministry of Agriculture and Natural Resources (MoANR), Ministry of Environment, Forest and Climate Change (MEFCC), Ministry of Water, Irrigation and Electricity (MoWIE) 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.

### 9.6 Organizational structure of the pilot project



## 10. Analyses of the Potential Impacts, Risks and the Mitigation 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.

### 10.1 Review of the Proposed REDD+ Strategic Options to Address the Drivers of Deforestation and Forest Degradation

#### 10.1.1 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 CO<sub>2</sub> 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+.

#### 10.1.2 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 15: Description of the anthropogenic and natural direct drivers of deforestation and forest degradation in Ethiopia.

<b>Factors</b>	<b>Types of Drivers</b>	<b>Impacts</b>	<b>Affected forest ecosystems</b>
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

<b>Factors</b>	<b>Types of Drivers</b>	<b>Impacts</b>	<b>Affected forest ecosystems</b>
	Livestock grazing	Degradation	High forest, woodlands
	Mining (small and large scale)	Deforestation Degradation	Woodlands High forests
	Roads and infrastructure	Deforestation Degradation	High forests 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 16: description of drivers of deforestation and forest degradation

<b>Drivers</b>	<b>Description</b>
<b>Small-scale agriculture:</b>	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.
<b>Large-scale permanent agriculture:</b>	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.
<b>Fuel wood extraction and charcoal production:</b>	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.
<b>Logging (legal and illegal) for timber and lumber production:</b>	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.
<b>Forest coffee plantations:</b>	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

<b>Drivers</b>	<b>Description</b>
	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.
<b>Livestock grazing:</b>	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.
<b>Mining (small and large scale)</b>	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.) minings are currently important drivers of deforestation in the high forest and woodland forest ecosystems.
<b>Infrastructure:</b>	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).
<b>Fire (wild and human caused):</b>	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.
<b>Droughts:</b>	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.
<b>Pests and diseases:</b>	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).

### 10.1.3 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 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 17: Description of the root factors and underlying causes of deforestation and forest degradation in Ethiopian

<b>Root Factors</b>	<b>Underlying causes</b>	<b>Scale of operation</b>
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

Table 18: description of underlying causes of deforestation and forest degradation.

Underlying causes	Description in the Ethiopian context
<b>Economic causes</b>	
<b>Commodity market</b>	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
<b>Investment</b>	Favourable 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
<b>Urbanization</b>	Economic development in urban centers and industrial expansion in the peripheral areas of urban centers push urban limits to forest landscapes and initiate deforestation
<b>Unemployment</b>	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.
<b>Social causes</b>	
<b>Poverty</b>	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.
<b>Livelihoods</b>	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.
<b>Conflicts</b>	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.
<b>Gender</b>	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.
<b>Awareness/education</b>	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.
<b>Political causes</b>	
<b>Equity</b>	Faire distribution of national resources is often lacking (either due to misguided policies, or for lack of impartiality or for lack of the proper

Underlying causes	Description in the Ethiopian context
	political instruments), and thus significant segments of the population will be left out and remain poor.
<b>Resource allocation</b>	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.
<b>Demographic</b>	
<b>Population growth</b>	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)
<b>Migration</b>	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 neighbouring countries. The south and southwest forests are under pressure from internal influx of people.
<b>Resettlement</b>	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.
<b>Cultural</b>	
<b>Attitude</b>	In some areas, people have negative attitude towards trees and forests as being source of pests and harbouring harmful animals (that attack crops). Thus, clearing the forest is seen as preventing those pests and harmful animals.
<b>Governance and institutions</b>	
<b>Policy (land and forest)</b>	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 not better none.
<b>Institutional structure</b>	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.
<b>Law enforcement</b>	Due to lack of implementation guidelines, absence of experience in handling criminal offenses in the sector, and sometimes due to corruption,

Underlying causes	Description in the Ethiopian context
	forest law enforcement is weak. Trace-passers/offenders are not penalized as per the law. This causes precedence for increased deforestation.
<b>Benefit sharing</b>	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 proven models for benefit sharing. Lack of such mechanism is contributing to deforestation and degradation.
<b>Tenure and Use rights</b>	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.
<b>Corruption</b>	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.
<b>Sectoral synergy</b>	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.
<b>Capacity</b>	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.

## 10.2 Proposed Strategic options to address the drivers of deforestation and forest degradation and Legal Institutional framework

The final **draft national REDD+ Strategy** identified comprehensive range of strategic options for REDD+ implementation, including 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 (specifically, the Oromia Forested Landscape Program). 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 existing legal and regulatory frameworks (such as the Environmental Impact Assessment Proclamation No. 299/2002; see Subsection 8.2.5 for further information). In this SESA, the proposed strategic options and the identified activities under each strategic option in the Table 19 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 19: 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>		
<b>Strategic Option categories</b>	<b>Main levers of the Strategic Options (SO)</b>	<b>Activities of the strategic options</b>
Policy and institutional measures	<ul style="list-style-type: none"> <li>• SO1: Enhancing cross-sectoral synergies and stakeholder participation</li> </ul>	<ul style="list-style-type: none"> <li>• SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)</li> <li>• SO1b: Put in place inter-regional coordination institutional arrangements</li> <li>• SO1c: Put in place joint planning among core sectors (agriculture, energy and forestry)</li> </ul>
	<ul style="list-style-type: none"> <li>• SO2: Ensuring effective forest governance and law enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• SO2a: Protecting natural forest</li> <li>• SO2b: Adequate financing of forestry institution</li> <li>• SO2c: Strengthening of regional and local level governance structures</li> <li>• SO2d: Develop skilled manpower</li> <li>• SO2e: Capacity building of legal practitioners at all levels</li> </ul>

<b>Strategic options and main levers in the draft national REDD+ strategy</b>		
<b>Strategic Option categories</b>	<b>Main levers of the Strategic Options (SO)</b>	<b>Activities of the strategic options</b>
	<ul style="list-style-type: none"> <li>SO3: Ensuring clear forest tenure and property rights</li> </ul>	<ul style="list-style-type: none"> <li>SO3a: Establish stable and equitable forest property right structures</li> <li>SO3b: Make legal and institutional reforms that warranty the forest ownership and use rights</li> <li>SO3c: Formulation of fair carbon rights for stakeholders</li> </ul>
	<ul style="list-style-type: none"> <li>SO4: Promoting Land Use Planning</li> </ul>	<ul style="list-style-type: none"> <li>SO4a: Develop national level land use planning framework guideline</li> <li>SO4b: Formulate broader regional land use plan</li> <li>SO4c: Formulate Woreda level land use plan</li> </ul>
<b>Targeted sector based measures (Focusing on forest, agriculture and energy sectors)</b>	SO5: Ensuring Sustainable Forest Management (in high forest as well as woodlands)	<ul style="list-style-type: none"> <li>SO5a: PFM and traditional/ customary forest management practices</li> <li>SO5b: Optimizing outputs without compromising the biodiversity of the forest in coffee growing areas</li> <li>SO5c: Prevent forest fire with the participation of relevant stakeholders and communities</li> </ul>
	<ul style="list-style-type: none"> <li>Enhancement of Forest Carbon Stock (SO6)</li> </ul>	<ul style="list-style-type: none"> <li>SO6a: Agroforestry</li> <li>SO6b: Area closure on degraded lands</li> <li>SO6c: Afforestation/reforestation</li> <li>SO6d: Integrate physical and biological conservation measures with afforestation and reforestation</li> <li>SO6e: Integrated carbon enhancement activities in existing watershed areas</li> </ul>
	<ul style="list-style-type: none"> <li>SO7: Agricultural intensification</li> </ul>	<ul style="list-style-type: none"> <li>SO7a: Agricultural intensification</li> <li>SO7b: Adopt climate smart agriculture</li> <li>SO7c: Assist natural regeneration (ANR) of degraded areas</li> <li>SO7d: Implement irrigation</li> </ul>
	<ul style="list-style-type: none"> <li>SO8: Reducing Demand for fuel wood and charcoal through increased efficiency and providing alternatives</li> </ul>	<ul style="list-style-type: none"> <li>SO8a: Dissemination and usage of fuel efficient stoves in urban centers and forest areas/villages</li> <li>SO8b: Use of feasible alternative energy sources (LPG, biogas, biofuel) in off-grid areas</li> <li>SO8c: Adopt energy saving techniques for public institutions (prisons, army barracks,</li> </ul>

<b>Strategic options and main levers in the draft national REDD+ strategy</b>		
<b>Strategic Option categories</b>	<b>Main levers of the Strategic Options (SO)</b>	<b>Activities of the strategic options</b>
		universities, hospitals)
	<ul style="list-style-type: none"> <li>• SO9: Increasing supply of wood and charcoal through increased afforestation and reforestation</li> </ul>	<ul style="list-style-type: none"> <li>• SO9a: Commercial tree planting</li> <li>• SO9b: Encourage on-farm tree planting</li> <li>• SO9c: Produce charcoal from both sustainably managed natural forests and plantations</li> <li>• SO9d: Promote modern charcoal production technologies</li> <li>• SO9e: Promote charcoal as an export commodity</li> </ul>
	<ul style="list-style-type: none"> <li>• SO10: Improving Livestock Management</li> </ul>	<ul style="list-style-type: none"> <li>• SO10a: Increase animal value-chain efficiency</li> <li>• SO10b: Improve cattle productivity (i.e., output per head of cattle via higher production per animal and an increased off-take rate)</li> <li>• SO10c: Improve the health of livestock</li> <li>• SO10d: Substitute meat protein consumption with protein from poultry to significantly reduce emissions from domestic animals</li> <li>• SO10e: Replace about 50% of animal draft power by mechanical equipment for ploughing/tillage</li> </ul>
	<ul style="list-style-type: none"> <li>• SO11: Promoting supplementary income generation options</li> </ul>	<ul style="list-style-type: none"> <li>• SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.)</li> <li>• SO11b: Promote forest-based enterprises based on wood products</li> <li>• SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest</li> <li>• SO11d: Increase the product value chains of forest</li> </ul>
<b>Cross-cutting Issues</b>	<ul style="list-style-type: none"> <li>• SO12: Capacity Building</li> </ul>	<ul style="list-style-type: none"> <li>• SO12a: Provide material support to those engaged in REDD+ process</li> <li>• SO12b: Provide technical trainings to those engaged in REDD+ process</li> <li>• SO12c: Provide local and international experience sharing to those engaged in REDD+ process</li> </ul>
	<ul style="list-style-type: none"> <li>• SO13: Inter-sectoral coordination on planning and implementation</li> </ul>	<ul style="list-style-type: none"> <li>• SO13a: Create and ensure strong coordination among relevant stakeholders</li> </ul>

<b>Strategic options and main levers in the draft national REDD+ strategy</b>		
<b>Strategic Option categories</b>	<b>Main levers of the Strategic Options (SO)</b>	<b>Activities of the strategic options</b>
	<ul style="list-style-type: none"> <li>• SO14: Demand-driven research and extension linkage</li> </ul>	<ul style="list-style-type: none"> <li>• SO14a: Evaluate models for private public partnership</li> <li>• SO14b: Valuation of forests and their contribution to national GDP</li> <li>• SO14c: Build in-country research capacity</li> <li>• SO14d: Ensure linkage between research and extension</li> </ul>
	<ul style="list-style-type: none"> <li>• SO15: Ensure full participation and equitable benefit sharing for women</li> </ul>	<ul style="list-style-type: none"> <li>• SO15a: Main stream gender in REDD+ process to benefit</li> <li>• SO15b: Develop women-specific knowledge on natural resource management</li> </ul>
	<ul style="list-style-type: none"> <li>• SO16: Benefit Sharing</li> </ul>	<ul style="list-style-type: none"> <li>• SO16a: Equitable distribution of the costs and benefits</li> <li>• SO16b: Solicit stakeholders to participate in REDD+ actions</li> <li>• SO16c: Share benefit to eligible ones accrued from REDD+ action</li> <li>• SO16d: Assists bylaw development of CBOs for benefit share among individual members</li> </ul>

### 10.2.1 Strategic Options to address the direct drivers of Deforestation and Forest Degradation

The analyses Table 20 below shows that the direct drives are addressed under the different strategic options and relevant activity measures are identified.

Table 20: Analysis of the strategic options vis-à-vis the direct drivers of deforestation and forest degradation

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

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

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

### 10.2.2 Strategic Options to address Underlying causes of Deforestation and Forest Degradation

The analysis in Table 21 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 21: 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>
<b>Economic</b>		
<b>Commodity market</b>	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> <li>• SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)</li> </ul>
<b>Investment</b>	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> <li>• SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)</li> <li>• SO1b: Put in place inter-regional coordination institutional arrangements</li> <li>• SO1c: Put in place joint planning among core sectors (agriculture, investment, energy and forestry)</li> </ul>
<b>Urbanization</b>	SO4: Promoting Land Use Planning	<ul style="list-style-type: none"> <li>• SO4a: Develop national level land use planning framework guideline</li> <li>• SO4b: Formulate broader regional land use plan</li> </ul>
<b>Unemployment</b>	SO11: Promoting supplementary income generation options	<ul style="list-style-type: none"> <li>• SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.)</li> <li>• SO11c: Promote other income generation (e.g. mushroom, poultry, silk production, etc.) other than forest</li> <li>• SO11d: Increase the forest product value chains</li> </ul>
<b>Social</b>		
<b>Poverty</b>	SO11: Promoting supplementary income generation options	<ul style="list-style-type: none"> <li>• SO11a: Forest related income generation (NTFP harvesting, PES mechanisms, etc.)</li> <li>• SO11c: Promote other income generation (e.g. mushroom,</li> </ul>

<b>Underlying causes</b>	<b>Strategic options</b>	<b>Relevant activities under the strategic options</b>
		<p>poultry, silk production, etc.) other than forest</p> <ul style="list-style-type: none"> <li>• SO11d: Increase the forest product value chains</li> </ul>
	SO16: Benefit Sharing	<ul style="list-style-type: none"> <li>• SO16a: Equitable distribution of the costs and benefits</li> <li>• SO16b: Solicit stakeholders to participate in REDD+ actions</li> <li>• SO16c: Share benefit to eligible ones accrued from REDD+ action</li> <li>• SO16d: Assists bylaw development of CBOs for benefit share among individual members</li> </ul>
<b>Livelihoods</b>	Diversifying livelihoods with non-forest based options	<ul style="list-style-type: none"> <li>• Providing high value crops, improved breeds and skill development trainings to the youth and forest dependent communities in forest areas</li> </ul>
<b>Conflicts</b>	Implementing forest resource utilization and management guidelines in refugee and IDP areas	<ul style="list-style-type: none"> <li>• Strict regulation and control of resource utilization in internally displaced people (IDP) and refugee areas</li> </ul>
<b>Gender</b>	SO15: Ensure full participation and equitable benefit sharing for women	<ul style="list-style-type: none"> <li>• SO15a: Main stream gender in REDD+ process to benefit</li> <li>• SO15b: Develop women-specific knowledge on natural resource management</li> </ul>
<b>Awareness/education</b>	SO12: Capacity Building	<ul style="list-style-type: none"> <li>• SO12a: Provide material support to those engaged in REDD+ process</li> <li>• SO12b: Provide technical trainings to those engaged in REDD+ process</li> <li>• SO12c: Provide local and international experience sharing to those engaged in REDD+ process</li> </ul>
<b>Political</b>		
<b>Equity</b>	Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> <li>• Improve access to social services (education, health, clean water, inputs, finance, etc...)</li> <li>• Improve governance and democracy</li> </ul>
<b>Resource allocation</b>	Ensuring balanced allocation of resources to the key sectors including forestry	<ul style="list-style-type: none"> <li>• Ensure sufficient financing to the forestry sector</li> </ul>
<b>Demographic</b>		

<b>Underlying causes</b>	<b>Strategic options</b>	<b>Relevant activities under the strategic options</b>
<b>Population growth</b>	Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> <li>Promote measures to family planning in areas of high population density, especially in forest areas</li> </ul>
<b>Migration</b>	Implement measures that regulate in-migration to forest regions (refugees and IDPs)	<ul style="list-style-type: none"> <li>Put in place a mechanism control on spontaneous migration of people from inside and outside the country to the forest areas</li> </ul>
<b>Resettlement</b>	Revise the resettlement policy to spare forest lands from being used for resettlements	<ul style="list-style-type: none"> <li>Resettlements are implemented only according to implementation guidelines (pre and post resettlement)</li> </ul>
<b>Cultural</b>		<ul style="list-style-type: none"> <li></li> </ul>
<b>Attitude</b>	Ensure communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> <li>Increase education and awareness on environmental, economic and social values of forests and their habitats</li> </ul>
<b>Values and Beliefs</b>	Increased local community awareness on the intergenerational and ecosystem wide benefits of forests	<ul style="list-style-type: none"> <li>Conduct awareness creation trainings in forest areas</li> </ul>
<b>Governance and institutions</b>		
<b>Policy (land and forest)</b>	SO4: Promoting Land Use Planning	<ul style="list-style-type: none"> <li>SO4a: Develop national level land use planning framework guideline</li> <li>SO4b: Formulate broader regional land use plan</li> </ul>
<b>Institutional structure</b>	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> <li>SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)</li> <li>SO1b: Put in place inter-regional coordination institutional arrangements</li> <li>SO1c: Put in place joint planning among core sectors (agriculture, investment, energy and forestry)</li> </ul>
<b>Law enforcement</b>	SO2: Ensuring effective forest governance and law enforcement	<ul style="list-style-type: none"> <li>SO2a: Protecting natural forest</li> <li>SO2b: Adequate financing of forestry institution</li> <li>SO2c: Strengthening of regional and local level governance</li> </ul>

<i>Underlying causes</i>	<i>Strategic options</i>	<i>Relevant activities under the strategic options</i>
		<p>structures</p> <ul style="list-style-type: none"> <li>• SO2d: Develop skilled manpower</li> <li>• SO2e: Capacity building of legal practitioners at all levels</li> </ul>
<b>Benefit sharing</b>	SO16: Benefit Sharing	<ul style="list-style-type: none"> <li>• SO16a: Equitable distribution of the costs and benefits</li> <li>• SO16b: Solicit stakeholders to participate in REDD+ actions</li> <li>• SO16c: Share benefit to eligible ones accrued from REDD+ action</li> <li>• SO16d: Assists bylaw development of CBOs for benefit share among individual members</li> </ul>
<b>Tenure and Use rights</b>	SO3: Ensuring clear forest tenure and property rights	<ul style="list-style-type: none"> <li>• SO3a: Establish stable and equitable forest property right structures</li> <li>• SO3b: Make legal and institutional reforms that warranty the forest ownership and use rights</li> <li>• SO3c: Formulation of fair carbon rights for stakeholders</li> </ul>
<b>Corruption</b>	Implement radical measures to stop corruption	<ul style="list-style-type: none"> <li>• Ensure good governance, accountability and transparency</li> <li>• Nurture democracy</li> </ul>
<b>Sectoral synergy</b>	SO1: Enhancing cross-sectoral synergies and stakeholder participation	<ul style="list-style-type: none"> <li>• SO1a: Revisit existing policies and strategies of key sectors (agriculture, investment, energy and other relevant sectors)</li> <li>• SO1b: Put in place inter-regional coordination institutional arrangements</li> <li>• SO1c: Put in place joint planning among core sectors (agriculture, energy and forestry)</li> </ul>
<b>Capacity</b>	SO12: Capacity Building	<ul style="list-style-type: none"> <li>• SO12a: Provide material support to those engaged in REDD+ process</li> <li>• SO12b: Provide technical trainings to those engaged in REDD+ process</li> <li>• SO12c: Provide local and international experience sharing to those engaged in REDD+ process</li> <li>• Enhance financial, human, structural and material capacity in the sector at the different levels</li> </ul>

### 10.3 Potential Environmental and Social Benefits of the Proposed REDD+ Strategic Options

Table 22: 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"> <li>• Help for sustainable reduction of deforestation and forest degradation</li> <li>• reduce fragile ecosystem degradation due to large scale agricultural investment, mining, and infrastructure development</li> </ul>	<ul style="list-style-type: none"> <li>• create coherent vision that outlines a path towards sustainable forest management</li> <li>• policy will be harmonized and key stakeholders will participate on implementation of the harmonized sectoral policy,</li> <li>• create legal framework among key stakeholder to reduce deforestation</li> </ul>
SO2: Forest governance and law enforcement-	<ul style="list-style-type: none"> <li>• ensure the continuous recruitment of potential crop trees by protecting browsing &amp; grazing in the existing forest</li> <li>• put restriction on expansion of farm land into forest</li> <li>• Enhance carbon sequestration/ maintain carbon stock</li> <li>• Improve forest fire management</li> <li>• 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</li> <li>• Encourage biodiversity Conservation</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance forest ecosystem service to the local community, regional and global</li> <li>• increase the contribution of forestry to the total GDP</li> <li>• enable the local community to have detailed knowledge of the forest resource in their vicinity</li> <li>• Increase Forestry's contribution to employment generation in Ethiopia</li> <li>• help hydro power and irrigation dams not to be silted and make them sustainable</li> </ul>
SO3: Forest tenure and property right	<ul style="list-style-type: none"> <li>• Enhance natural resource conservation and local community involvement on reduction of deforestation and forest degradation</li> </ul>	<ul style="list-style-type: none"> <li>• Improve incentives or abilities to invest in forest sector</li> <li>• help community to use their labour, wealth, and creativity in forest management</li> <li>• help underserved community to access forest resource benefits</li> </ul>
SO4: Land use planning	<ul style="list-style-type: none"> <li>• Help reduction of deforestation due to conversion of</li> </ul>	<ul style="list-style-type: none"> <li>• increase productivity of agricultural land</li> </ul>

<b>Proposed Strategic options</b>	<b>Environmental Benefits</b>	<b>Social Benefits</b>
	<p>forest land into other land use.</p> <ul style="list-style-type: none"> <li>• make sustainable and long-term land improvement and management practices</li> </ul>	<ul style="list-style-type: none"> <li>• reduce conflict between different key actors on land resource</li> <li>•</li> </ul>
SO5: Ensure Sustainable Forest Management-	<p>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,</p>	<p>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</p>
SO6: Enhancement of	Improved soil fertility and yields	Increased income and savings

<b>Proposed Strategic options</b>	<b>Environmental Benefits</b>	<b>Social Benefits</b>
forest carbon stock	<p>Reduce pressure on forest resource for fuel wood soil conservation, erosion control and water conservation trees planted in agricultural land will help as wind breaks It helps to hold soil in place during and after harvest of farm crops. This allows for ground moisture levels to remain regular, reduces soil degradation and erosion. ensure the continuous recruitment of potential crop trees by protecting browsing &amp; 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 improved 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</p>	<p>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</p>
SO7: Agricultural intensification-	<p>enhanced land &amp; 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 Reduce Expansion of small scale agriculture in to forest area Agricultural practices will be improved</p>	<p>reduce poverty which led forest extraction for sale Enhance income of the community Create job opportunity Improved household food security and diet Livelihood of the local community will be enhanced reduce expansion of agriculture improve agricultural practice diversify crop production and nutrition</p>

<b>Proposed Strategic options</b>	<b>Environmental Benefits</b>	<b>Social Benefits</b>
<p>Lower emitting techniques for Agriculture</p> <p>Yield increasing techniques for agriculture</p>	<p>Increase crop diversification Reduce forest degradation pressure on forest</p> <p>Stimulate soil biodiversity Augment the soil organic carbon stock Tillage and residue management reduced soil loss and increase soil organic matter content enhance water and nutrient retention in the soil improve soil fertility through soil organic matter input increase biomass accumulation and carbon sequestration</p> <p>Reduce deforestation and forest degradation Prevent or reduce lateral expansion of agriculture so that more land can be saved for conservation</p>	<p>Enhance capacity of local community with new techniques</p> <p>Increase productivity of land Increase food security Improved rights and access to land</p>
SO8: Reduce demand for fuel wood and charcoal-	<p>Provide alternative energy Reducing emissions of carbon monoxide by more efficient burning Reduce loss of forests and thus increased potential for biodiversity conservation and maintenance of ecosystems services Reduce in environmental pollution Conserve the forest</p>	<p>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</p>
SO9: Increase wood and charcoal supply	<p>More carbon sequestration Micro-climate improves Recurrent drought experienced by the country halt Reduce non-sustainable and high rates of wood fuel extraction that destroy forests and woodlands and the</p>	<p>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</p>

<b>Proposed Strategic options</b>	<b>Environmental Benefits</b>	<b>Social Benefits</b>
	<p>environmental services these provide including soil and water conservation</p> <p>decreases deforestation and forest degradation on other forests (such as high forest)</p> <p>increase on farm species diversity</p> <p>enhance soil fertility</p> <p>avoid deforestation by overharvesting of charcoal production</p> <p>help to conserve resources,</p> <p>Reduce fuel wood consumption and then reduction of CO2 emissions from biomass</p> <p>reduce impact on endangered species since it will be done on invasive species like <i>Prosopis Juliflora</i></p>	<p>improve household income and socio-economic well-being of farmers</p> <p>Encourages the creation of wood product</p> <p>Improves wood self sufficiency</p> <p>source of supplementary income or as women’s work</p> <p>reduce migration from rural or forested areas and improve people’s incomes</p> <p>charcoal makers would produce charcoal as their main activity</p> <p>Increase foreign income,</p> <p>create job opportunity for youth and landless people</p> <p>reduce impact of invasive species on range land and farm land</p>
<p>SO10: Improved livestock management-</p>	<p>change impact of large crowd of livestock on regeneration or recruitment of seedlings by reduce number of livestock</p> <p>reduce pressure on the available resources</p> <p>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</p> <p>reduce loss of livestock genetic resources</p> <p>Significantly reduce emissions from domestic animals. reducing the pressure on fragile ecosystems</p> <p>reduce pressure on natural resource by keeping animal draft for ploughing</p>	<p>Effective, market-oriented livestock production increase output quantity, quality and prices</p> <p>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</p> <p>Improve livestock sector infrastructure and provide greater incentives for market participation and productivity</p> <p>increase income of the local community, create job opportunity for landless community members</p> <p>reduce farmers economic loss</p> <p>Increase productivity of livestock</p> <p>secure sustainable household income</p>

<b><i>Proposed Strategic options</i></b>	<b><i>Environmental Benefits</i></b>	<b><i>Social Benefits</i></b>
		<p>increase animal protein supplies to match human needs                      Since it is initial investment cost is small it involves young, women and other community in poultry production                      Mechanization leads to food self sufficiency                      improve livelihoods of smallholder farming communities</p>
<p>SO11: Promote supplementary income generation</p>	<p>improve the value of source of NTFP, thus reducing the risk of deforestation while still obtaining sustainable benefits from these forest for the local communities                      Enhance sustainable management and use of NTFP source of trees,                      substantial amounts of carbon will be stored both in the above ground and below ground biomass                      Increase substantial amount of carbon stock sequestration,                      forest resources will be sustainably managed                      Soil erosions will be substantially reduced                      reduce pressure on natural forest                      plantation forests will serve as a buffer zone of natural high forests and woodlands                      Regular forest resource monitoring system will be established                      reduce pressure on natural forest,                      reduce illegal logging on natural forest                      help for sustainable management of the forest</p>	<p>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</p>

<b><i>Proposed Strategic options</i></b>	<b><i>Environmental Benefits</i></b>	<b><i>Social Benefits</i></b>
		climate shocks by increasing their house hold income from direct selling of forest products create job opportunity for underserved community, Enhance household income diversify nutrition of the community increase contribution of the forest resource for the national GDP, increase involvement of different stakeholders in the value chain process
SO12: Capacity building	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	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-	strengthen sustainable forest rehabilitation	reduce conflict among stakeholders working on land resources harmonize policy conflict create linkages with different stakeholders
SO14: Demand-driven Research and extension linkage	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 help promoting technologies of forest management, renewable energy and agroforestry to meet the needs and sustainable implementation of REDD+	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 establish data base system on forest resources analyze gaps and provide solution for social problems

<b><i>Proposed Strategic options</i></b>	<b><i>Environmental Benefits</i></b>	<b><i>Social Benefits</i></b>
	help sustainable afforestation and restoration of forest resources	
SO15: Ensure full participation and equitable benefit for women	<p>help sustainable conservation of forest resources</p> <p>help sustainable conservation of forest resources</p>	<p>women participation in forest use and management will be enhanced</p> <p>Women’s concerns of tree planting will be addressed</p> <p>Improve security of tenure for women by planting boundary trees</p> <p>It has the potential to positively affect women’s roles and status in relation to land ownership and management</p> <p>Women’s knowledge of landscapes and ecosystems can help REDD+ projects succeed</p> <p>Women’s inclusion exhibits the likelihood to improve forest conditions</p> <p>Women’s inclusion in REDD+ is itself a crucial safeguard issue that warrants immediate attention</p> <p>Help to compensate women equitably for their engagement in forest protection and carbon monitoring activities.</p> <p>Women organizations may get information in all phases of REDD+ Implementation</p> <p>Women can play an essential role in forest monitoring</p> <p>Enhance women involvement in and influence over decision-making processes that define their access to forest rights and resources, and rights to assets, including land and other property</p>
SO16: Benefit sharing	<p>enhance conservation and rehabilitation of forest resources</p> <p>enhance participatory conservation of forest resources</p> <p>ensure the participation of communities in forest</p>	<p>Help to organize community groups and regional government/forest services share the benefits,</p> <p>Ensure poor and underserved/disadvantaged groups have equal chance to participate</p>

<b>Proposed Strategic options</b>	<b>Environmental Benefits</b>	<b>Social Benefits</b>
	protection and conservation help conservation of the forest resources by the forest local community	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

### 10.4 Potential Environmental and Social Risks of the Proposed REDD+ Strategic Options and the Mitigation Measures

Table 23: Analyses of environmental and social risks of the proposed strategic options and the mitigation measures

<b>Strategic options</b>	<b>Environmental</b>		<b>Social</b>	
	<b>Risks</b>	<b>Mitigation measures</b>	<b>Risks</b>	<b>Mitigation measures</b>
SO1: Enhance cross-sectorial synergies and stakeholder participation-	Increased deforestation and forest degradation due to absence of full collaboration of sectoral institutes with MEFC (e.g. law enforcement weakness) Less likely collaboration of sectoral institutes for joint planning on forest issues	Coordination unit to be established in relevant Ministry Offices that check synergy of the sectoral institutes Assign counterpart (focal person) in each sectoral office that links MEFC with them	Inefficient social service from the sectoral office due to absence or little synergy	Enhance synergy
SO2: Forest governance and law enforcement-	May bring increased forest degradation from organized illegal cuttings May call for total	Avail forest products and non-timber forest products which the community depends on the forest from	Restriction over livestock pasture resource Restriction over expansion of farmlands	Let the community use grass in cut and carry system Intensify productivity per unit area through improved input

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	environmental destruction from mass mobilized cuttings and setting of forest fire	<p>other sources</p> <p>Share benefit to the community from the income accrued due to the protection of forest</p> <p>Increase the awareness of the community through training and education</p> <p>Law enforcement should be in place</p> <p>Allow community use the resource without cutting the trees e.g. for ritual, cultural practices,</p> <p>Educate and train the community on the value of the forest</p> <p>Prepare enough through capacity building (human &amp; material) to suppress fire incase fire is set</p> <p>Empower indigenous grievance redress mechanisms</p>	<p>Restriction over fuel, construction and farm implement forest resources</p> <p>Conflict between local communities and protecting agents</p> <p>Restriction over member of communities that traditionally use the forest for religious rituals</p> <p>Obstruction of routes that connect communities living on either sides of the forest</p> <p>Hosts wild animals that may frequently attack livestock of surrounding communities</p> <p>Strong institutions may override community based institutes that protected forest for centuries</p>	<p>use so that areal expansion of agriculture land halt</p> <p>Supply improved cooking and baking stoves to the community which depends on forest for energy source</p> <p>Materialize the second phase growth and transformation plan (GTP) of Ethiopia that gives due emphasize to renewable energy sources</p> <p>Shift from wood to metal and/or blocks for construction</p> <p>Ploughing system shift from traditional to low or no tillage</p> <p>Use customary conflict redress mechanism</p> <p>Enhance the benefit of the community from the enclosed area</p> <p>Compensate as per the complementary RPF provisions</p> <p>Allow communities to practice the ritual and religious practices in the forest as far as these do not affect the forest</p> <p>Area enclosure should leave access routes for communities to move freely</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
				<p>If obstruction of access route is must, another reasonably convenient route must be arranged as per the key steps outlined in the complementary Process Framework</p> <p>Maintain wildlife numbers to manageable size</p> <p>Strengthen and empower CBOs as too be more critical and accountable</p>
SO3: Forest tenure and property right	<p>Attractive forest tenure and property right may increase land grabbing opportunity</p> <p>May increase the value of forest land over agriculture land</p> <p>Disrupts traditional tenure and forest management systems</p> <p>Change in land use type may be induced (e.g. from agriculture to forest or vice versa)</p>	<p>Implement effective law enforcement to deter land grabbing</p> <p>Government should implement land use planning</p> <p>Synchronize traditional and modern land use system get the best out of the combination</p> <p>Compensation planting required if change is from forest to agricultural lands</p>	<p>Small holder farmers may be evicted from their holdings for forest investment</p> <p>Loss in land ownership may be induced (e.g. from private to government or vice versa)</p> <p>Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest</p>	<p>Organize community in CBO/PFM and let them have their own forest</p> <p>Adequate compensation in kind and other means by the government based on the legal framework and the RPF</p>
SO4: Land use planning	<p>Change in land use type may be induced (e.g. from</p>	<p>Compensation planting required if change is from</p>	<p>Loss in land ownership may be induced (e.g. from</p>	<p>Adequate compensation in kind and other means by the</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	agriculture to forest or vice versa)	forest to agricultural lands	private to government or vice versa) Coffee forest farmers may be affected by the change of the forested coffee to pure stand of forest	government based on the legal framework and the RPF
SO5: Ensure Sustainable Forest Management  (Protected forests and Participatory Forest Management)  PFM operations	Closing high forests for rehabilitation may lead to increased deforestation due to strict access restriction Create economically driven forest mismanagement that may lead to forest degradation May instigate deforestation from marginalized local communities and/or little benefiting PFM members Low economic value forests in lowland areas may not attract PFM organization Coffee farming in the forest has already degraded biodiversity and further permit of coffee farming in the forest may	Allow controlled access into forest rehabilitation areas for NTFP collection Hybrid of PFM and Traditional forest management with scientific management so that forests utilized based on forest management plan PFM should encompass all community members with equal benefit sharing Enhance the economic value of the lowland forests through forest industry installation Strict control over the expansion of coffee planting in the forest Put in place where the undergrowth and natural regeneration of tree species allowed to grow	Complete closure deprives the poor of livelihoods generated from NTFPs Interventions of PFM are prone for any physical damage since it does not have legal support under Ethiopian law PFM experiences in Ethiopia is mainly in a high forest this may have negative impact to adapt in low land woodland areas where there are different socio-economic and ecological conditions Creates dependency syndrome on local communities because of long term incentivization by implementing projects to protect the resource Conflict over benefit	Provide controlled access to rehabilitated areas PFM need to be supported by legal framework by promulgating new policy Educate and train communities in the lowland areas about PFM Assist communities in the low land areas to carry-out experience sharing visit in high land areas Encourage self dependency of the PFM groups through enabling them generate their own income from the forest management activities As long as possible, no community member should be left out from the PFM The PFM bylaw and the legal framework should define the power of the PFM leaders

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	worsen the condition Stakeholder and community may not be mobilized as required Tragedy of the commons	Put in place maintenance of minimum number of indigenous tree species where coffee is farmed Build own capacity of fire prevention system Educate people Select appropriate species for the purpose	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	The leader should be sued in case of default Fairly allocate access rights to the members of the community The PFM bylaw should ensure access to all community members
SO6: Enhancement of forest carbon stock (Assisted natural regeneration with enrichment planting (high forest + woodland))	Aggravate environmental degradation from setting of fires Aggravate illegal cuttings and destruction of regenerating biodiversity Increase conflict between wildlife & humans & increase crop pests (birds, mammals) Risk of monoculture plantation Compromise to local biodiversity Risk of harbor of crop pests in reforested area Some soil impacts can be expected as a result of plantation forests	Educate and enhance the awareness of community Fence to exclude encroachment Do not come close to the habitat/breeding place of wildlife Share benefit from the wildlife hunting/ ecotourism so that community feels ownership over the resource Use integrated crop pest management practice Plant mixed species Allow natural regeneration under the monoculture species so that the regenerated species	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 High costs of seedling production to carry out plantation relative to enrichment plantings Brings loss of economic benefits	The household should manage the size of the land that can be managed by the family members Use mechanized/ improved technology for time and energy efficiency reason Adequate compensation in kind or other means by government based on the legal framework and the RPF Use cut and carry system Proportionate the number of livestock with the available resource amount Intensify productivity per unit area through improved input use so that areal expansion of agriculture land halt

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
Commercial timber plantation (high forest zone)	<p>operations, including erosion, decreasing surface runoff and the development of a protective forest floor</p> <p>Poorly designed and mass mobilized conservation measures aggravate soil erosion</p>	<p>overtake the plantation</p> <p>Plant local/indigenous tree species</p> <p>Allow natural regeneration under the monoculture species so that the regenerated species overtake the plantation</p> <p>Use integrated crop pest management practice</p> <p>Allow undergrowth through wider space planting</p> <p>Install soil and water conservation practice (physical &amp; biological) to harness erosion</p> <p>Implement conservation measures using experts/well trained person only</p> <p>Enforce landuse plan to come into force</p>	<p>Create access restriction for resource utilizations</p> <p>Create land computation with local community</p> <p>Can prevent human and livestock mobility</p> <p>From previous experience of large scale plantation people feel fear of loss of land ownership</p> <p>Fire is a concerns that fire will increase and could affect neighboring properties</p> <p>Some soil impacts can be expected as a result of plantation forests operations, including erosion, decreasing surface runoff and the development of a protective forest floor.</p>	<p>Use customary conflict redress mechanism</p> <p>Enhance the benefit of the community from the enclosed area</p> <p>Compensate as per the complementary RPF provisions</p> <p>Area enclosure should leave access routes for communities to move freely</p> <p>If obstruction of access route is must, another reasonably convenient route must be arranged</p> <p>Subsidize the seedling production cost through support by NGOs operating in the area</p> <p>collect seed from local sources and raise them in community owned nursery</p> <p>Compensate as per the complementary RPF provisions</p> <p>Ensure benefit sharing from the reforestation/ afforestation through their active involvement in the activities</p> <p>Allow cut and carry practice</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
				for the grass use Allow the utilization of NTFP Implement reforestation/ afforestation on land with no competing interest (e.g. previously forested land or marginalized land) with the community reforestation/ afforestation should leave access routes for communities to move freely If obstruction of access route is must, another reasonably convenient route must be arranged as per the process and procedures outlined in the complementary Process framework Legal confirm them the forest to be developed on their own land finally belongs to them Do not plant fire prone tree species Plant mixed species to minimize the risk of fire setting naturally or deliberately Train the community on forest fire risk and forest fire

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
				management Construction fire break line between the forest and the properties of the community Get prepared suppressing the fires though 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
SO7: Agricultural intensification-  Lower emitting techniques for agriculture  Agro-forestry	Quarantined agroforestry species may become invasive and damage the natural environment May be less effective in cases where mono culture practice more benefits the environment (e.g. in dissected landscapes) Where the tree and crop or livestock components overlap in their use of resources, competition may lead to reduced productivity ( e.g.	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	Highly fragment land use types of an individual household and may end up in highly reduced products Difficult to introduce due to long gestation period of the trees Traditional monoculture farming system Intensive care for the various agroforestry practices consumes the time and energy of household members Create farmers to depend	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

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
Nitrogen Management	<p>Competition for water between tree and crop components is likely to limit productivity)</p> <p>Siltation of reservoirs</p> <p>Fertilizer runoff and leaching; eutrophication and effect on human health</p> <p>Runoff of pesticides and similar agricultural chemicals</p>	<p>Implement watershed management practice to protect reservoirs</p> <p>Protect the farmlands with integrated soil &amp; water conservation (biological &amp; physical) measures</p> <p>Use of inputs (fertilizers and other chemicals) based on soil and plant tissue analysis for nutrient</p> <p>Treat water before using</p>	<p>on agricultural inputs like fertilizer</p> <p>Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides</p> <p>affects human health due to agricultural chemicals</p> <p>Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women</p> <p>Limited purchasing capacity of inputs (improved seeds, fertilizers seedlings) can limit potential gains</p> <p>CSA sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively</p> <p>Only rich farmers may benefit from CSA</p>	<p>above 2 tree species with other crops</p> <p>Encourage agriculture intensification by the use of compost than chemical fertilizer especially for smallholder farmers</p> <p>Use integrated pest management system which proved best than single types of pest management practice</p> <p>Give awareness creation on health and safety of agro-chemicals</p> <p>Use of personal protective equipment whenever applying agro-chemicals</p> <p>Offer continuous and sustained education &amp; awareness creation on the appropriate use of chemicals</p> <p>Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers</p> <p>Educate and train community on the benefit of CSA</p>
Soil carbon storage and management	<p>Eroded agricultural genetic resources essential for food security in the future.</p> <p>Increased pesticides harms animal and human health by accumulating in soils and leaching into water bodies</p> <p>Salinization and regimes of underground water</p>	<p>Protect the farmlands with integrated soil &amp; water conservation (biological &amp; physical) measures</p> <p>Never erode the local genetic resource; work side by side on both local and improved crop varieties to enhance food security</p> <p>Use personal protective equipment whenever applying chemicals</p> <p>Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops</p> <p>Continuous leaching of the</p>	<p>on agricultural inputs like fertilizer</p> <p>Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides</p> <p>affects human health due to agricultural chemicals</p> <p>Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women</p> <p>Limited purchasing capacity of inputs (improved seeds, fertilizers seedlings) can limit potential gains</p> <p>CSA sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively</p> <p>Only rich farmers may benefit from CSA</p>	<p>above 2 tree species with other crops</p> <p>Encourage agriculture intensification by the use of compost than chemical fertilizer especially for smallholder farmers</p> <p>Use integrated pest management system which proved best than single types of pest management practice</p> <p>Give awareness creation on health and safety of agro-chemicals</p> <p>Use of personal protective equipment whenever applying agro-chemicals</p> <p>Offer continuous and sustained education &amp; awareness creation on the appropriate use of chemicals</p> <p>Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers</p> <p>Educate and train community on the benefit of CSA</p>
Tillage and residue Management	<p>Inadequate drainage and over-irrigation causes water logging</p> <p>Lowering of water tables</p> <p>Water diversions for agriculture are a major problem for many aquatic</p>	<p>Protect the farmlands with integrated soil &amp; water conservation (biological &amp; physical) measures</p> <p>Never erode the local genetic resource; work side by side on both local and improved crop varieties to enhance food security</p> <p>Use personal protective equipment whenever applying chemicals</p> <p>Protect animal from entry into the farm area until the chemicals dilute and assimilated by the crops</p> <p>Continuous leaching of the</p>	<p>on agricultural inputs like fertilizer</p> <p>Reduces farmers' ability to use natural pest cycles, leading to increased need for pesticides</p> <p>affects human health due to agricultural chemicals</p> <p>Lack of awareness about appropriate use of chemical fertilizers/pesticides due to lack of education and knowledge of community, especially women</p> <p>Limited purchasing capacity of inputs (improved seeds, fertilizers seedlings) can limit potential gains</p> <p>CSA sometimes need adopting new farming system and technology which may not be both accepted earlier and afforded financially respectively</p> <p>Only rich farmers may benefit from CSA</p>	<p>above 2 tree species with other crops</p> <p>Encourage agriculture intensification by the use of compost than chemical fertilizer especially for smallholder farmers</p> <p>Use integrated pest management system which proved best than single types of pest management practice</p> <p>Give awareness creation on health and safety of agro-chemicals</p> <p>Use of personal protective equipment whenever applying agro-chemicals</p> <p>Offer continuous and sustained education &amp; awareness creation on the appropriate use of chemicals</p> <p>Government needs to subsidize any cost related to agricultural intensification to encourage the use of the same by community, especially small holder farmers</p> <p>Educate and train community on the benefit of CSA</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
Water management techniques	species.	<p>farms with water</p> <p>Irrigate the farms based on the soil water requirement analysis</p> <p>Use drip irrigation to avoid both under and over irrigating</p> <p>Implement practices that recharge ground water (watershed management, soil &amp; water conservation structure)</p> <p>Diversion of water to only the threshold level beyond which aquatic live do not affected</p>	<p>Prevalence of water-borne diseases (giardia, schistosomiasis, etc.) may increase</p> <p>Increased exposure to malaria</p> <p>Shortage or lack of water resource to downstream users</p> <p>Conflicts between neighboring communities over water resource utilization</p>	<p>Assist poor farmers technically and materially</p> <p>Educate and give sustainable training to the community on water and sanitation including water borne diseases</p> <p>Enhance health facility for the treatment of water borne diseases if these are inevitably occurring</p> <p>Avoid water logging through adequately draining</p> <p>Disturb stagnant water continuously to break the breeding/life cycle of the insect</p> <p>Cater mosquito net to the community</p> <p>Implement wise and fair use of water</p> <p>Water use to be implemented based on the schedule to be fixed by the consent of the upper and lower community</p> <p>Harvest excessive water during the high moisture seasons for the later dearth period use</p> <p>Water use to be implemented</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
<p>Yield increasing techniques for agriculture</p> <p>Improved livestock management systems</p> <p>Enhancing and intensification of animal mix</p> <p>Live stock value-chain efficiency improvement</p>	<p>Solid wastes expected from poultry farm</p> <p>Nuisance odor expected from poultry farm</p> <p>Mechanization leads to intensive use of agricultural inputs that results in pollution</p>	<p>Use the waste for fertilizing soil in farm land</p> <p>Poultry farm to be performed far from the residential areas</p> <p>Implement the EMP recommended in the ESIA of the project whenever available</p> <p>Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any</p>	<p>Market problem of the products of livestock may be a challenge</p> <p>Milk malnutrition especially to the kids</p> <p>Bird diseases that is communicable to human may be a problem</p> <p>Loss of assets (livestock) to be used for emergency case by selling</p>	<p>based on the schedule to be fixed by the consent of the upper and lower community</p> <p>Identify local and oversea markets for the products</p> <p>Maintain milk cows</p> <p>Purchase and transport milk from surplus area</p> <p>Sanitation to be maintained 24 hours a day, 7 days a week</p> <p>Bio-safety measures to be taken</p> <p>Educate farmers on saving of what is earned (from the main income generating or alternative income sources activities)</p> <p>Maintain few livestock to be used as an asset</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
<p>SO8: Reduce demand for fuel wood and charcoal-</p> <p>Energy Efficient stoves</p>	<p>Increased use of energy inefficient stove may indirectly lead to high biomass energy demand and consumption which in turn cause deforestation</p>	<p>Go for alternate energy sources (such as solar, wind, hydropower, geothermal)</p>	<p>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 production-marketing chain                      Stoves in high demand areas due to long production-marketing chain                      Exploitation by middle men in the market chain                      Time taking: long awareness creation and technology adoption</p>	<p>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 give sustained training on the relative advantage of electricity/fuel efficient stove over the traditional stove                      Avail electricity and cooking/baking stoves at very attractive price                      Solicit fund for the soonest project implementation e.g. fuel efficient cooking/baking stoves catering                      Begin with the few number of farmers and gradually increase it                      Build the capacity of community members for own community demand making of the stoves                      Focus on institutional and</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
Biogas	<p>Reduces organic residue return to the production system</p> <p>Mismanagement may create additional release of methane to the atmosphere</p>	<p>Manage sludge efficiently and ensure maintenance of residues in the farm system</p> <p>Apply proven technology and provide sufficient technical skill training to users</p>	<p>process</p> <p>High initial investment cost may not attract rural farmers</p> <p>Lack of management skill may discourage farmers</p>	<p>communal schemes than individual households</p> <p>Facilitate access to soft loans</p> <p>provide the necessary skill training</p>
<p>SO9: Increase wood and charcoal supply</p> <p>Woodlots (small-holder and community)</p>	<p>Exotic species may dominate as these are fast growing than the indigenous</p> <p>Environmental degradation during harvesting and transporting time</p> <p>Adverse micro-climate modification after harvesting</p> <p>The act induces more numbers of charcoal users which means more carbon emission</p>	<p>Researching on fast growing indigenous tree species</p> <p>Employ semi-mechanized system during harvesting</p> <p>Harvest based on the rotation period (do not harvest all at a time)</p> <p>Sequester the emitted carbon by planting trees of environmental value (e.g. for carbon financing, ecosystem protection)</p> <p>Use charcoal gadgets with chimney and lid that prevent entry of particulate</p>	<p>Market problem may be a challenge</p> <p>high transport, operation and maintenance costs and the length of time it takes to reach commercial centers</p> <p>May bring food insecurity as farm lands devoted to plantation</p> <p>Labor may be a problem for the family to harvest the forest products</p> <p>Transporting to the market center may be a problem</p>	<p>Look potential local and overseas forest products</p> <p>improve road network in the coming GTP2 years</p> <p>create wood market centers at optimum distance from the plantation area</p> <p>Transport food from surplus production area</p> <p>Incorporate NTFP (such as honey) in the system</p> <p>Hand operated simple machine catering to tree farmers at subsidized price</p> <p>Organize in CBO and pull the</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	<p>Environmental pollution by particulate matters from the use of charcoal</p> <p>High calorific value wood plantation leads to monoculture that brings about loss in biodiversity</p> <p>Fire risks from the tree species planted for charcoal production as they are susceptible to ignition</p>	<p>into the environment</p> <p>Allow natural regeneration under the plantation</p> <p>Have different plantation sites for biodiversity and environmental protection</p> <p>Construct fire breaks between blocks of forest</p> <p>Build capacity (human and material) to suppress fire in case it sets</p>	<p>due to farmers financial capacity</p> <p>Loss of livestock due to communal land (such as grazing lands) allocation for tree planting</p> <p>Animal protein malnutrition (meat &amp; milk) due to loss of livestock s grazing lands go for tree plantings</p> <p>Charcoal market problem may be encountered</p> <p>Indoor air pollution that may cause acute and chronic respiratory diseases, malignancies of the aero-digestive tract and lungs, burns, eye diseases</p>	<p>resource together to solve financial problem</p> <p>Encourage tree plantings on marginal lands and own plot</p> <p>Transport from met and milk surplus areas</p> <p>Assess the feasibility of charcoal market before embarking on it</p> <p>Educate on the health impacts of indoor charcoal pollution</p> <p>Ventilate rooms whenever using charcoal</p>
SO10: Improved livestock management-	<p>Solid wastes expected from poultry farm</p> <p>Nuisance odor expected from poultry farm</p> <p>Mechanization leads to intensive use of agricultural inputs that results in pollution</p>	<p>Use the waste for fertilizing soil in farm land</p> <p>Poultry farm to be performed far from the residential areas</p> <p>Implement the EMP recommended in the ESIA of the project whenever available</p>	<p>Market problem of the products of livestock may be a challenge</p> <p>Milk malnutrition especially to the kids</p> <p>Bird diseases that is communicable to human may be a problem</p> <p>Loss of assets (livestock) to</p>	<p>Identify local and oversea markets for the products</p> <p>Maintain milk cows</p> <p>Purchase and transport milk from surplus area</p> <p>Sanitation to be maintained 24 hours a day, 7 days a week</p> <p>Bio-safety measures to be taken</p>

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
		Test for soil and water samples regularly to check the environmental pollution standards of Ethiopia not breached and also rectify problems earlier if any	be used for emergency case by selling	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	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. coffee forest of the country) More number of forest enterprises put the forest under pressure May aggravate deforestation and forest degradation with the increase of the prices of forest products and NTFP parallel to increase in	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 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	Conflict arise if unfair access or use right on NTFP prevail within the community	Provide fair access to community members, especially the underserved and women

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
	value chain			
SO12: Capacity building	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	Inclusion of all relevant experts in the forestry sector at different levels Capacity support should include facilities and financial support to forest sector offices	Participation of women and wider stakeholder groups may be neglected Support may be shared by those who already have the needed capacity	Ensure the participation of women is prioritized and all stakeholders have to the opportunity to participate Support should prioritize those with serious capacity problem
SO13: Inter-sectoral coordination on planning and implementation-	Lingering decision making process may result in further destruction of forest resources Inaction may weaken law enforcement and cause loose control over uncontrolled extraction	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	Stakeholders may not collaborate as desired	Establish stakeholder coordination and mobilization unit for the daily follow up
SO14: Demand-driven Research and extension linkage	High priority environmental issues may be neglected Research results may not lead to action on the ground	Research needs identification and prioritization should be carried Academics and forestry sector experts should work together to apply research outputs	Community needs may not be properly addressed Underserved communities may not benefit from the research and extension	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	Loss of cultural, medicinal, etc. value species may occur while disregarding others than women	Allow all community segment (men & women, youth & elders, etc.,) contribute available	Weak collaboration of sectoral institutes in mainstreaming gender Disregard/ marginalize	Build and strengthen institutional capacities of implementing partner organizations (IPOs) in gender

Strategic options	Environmental		Social	
	Risks	Mitigation measures	Risks	Mitigation measures
		knowledge for the management of the natural resource	knowledge and expertise of others (other area skill & knowledge will be eroded overtime)	and REDD+ issues Allow all community segment (men & women, youth & elders, etc.) contribute available knowledge for the management of the natural resource
SO16: Benefit sharing	REDD+ implementation may result in more deforestation and forest degradation if it carries cost to the community Late recognizer of the benefit of the REDD+ project may be adversely affected the REDD+ project forest	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	Community may refuse to accept costs that REDD+ project brings to them Lack clear mechanisms for sharing benefits may result in grievances Overridden stakeholders adversely affect the implementation of REDD+ project Income difference may be created between the REDD+ project members and non-members Unequal participation in the development of bylaw may bring disparities in implementing the bylaw	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 Implement indigenous grievance redress mechanism Exhaustively involve stakeholders based on their degree of contribution Create alternate income generating opportunities for the non-members of the REDD+ projects extend membership to none members Let all community members participate in the development of the bylaw

## 10.5 Suggested Enhancement Strategic Options for Further Consideration in line with the environmental and social situations

Table 24: Analyses of the environmental and social benefits of the suggested Enhancement Strategic Options

<b><i>Suggested Enhancement Strategic options</i></b>	<b><i>Environmental Benefits</i></b>	<b><i>Social Benefits</i></b>
ESO1: Diversifying local Livelihoods to Non-forest based Options	<ul style="list-style-type: none"> <li>Reduced dependence on forest resources for communities in and around forestland areas will decrease the risk of deforestation and forest degradation</li> </ul>	<ul style="list-style-type: none"> <li>Increases access to alternative income sources for local communities and forest dependent communities</li> <li>Improve food security and health, creates job opportunity, increase income</li> </ul>
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit the poor segment of society)	<ul style="list-style-type: none"> <li>Reducing poverty decreases the pressure on forests and reduces deforestation by forest dependent communities</li> </ul>	<ul style="list-style-type: none"> <li>Pro-poor development activities will lift significant proportion of the population from absolute poverty and will increase their participation in local development initiatives.</li> </ul>
ESO3: Promoting participation and empowering of underserved communities	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Promotes social inclusion and fair distribution of services to the needy and more disadvantaged groups of society.</li> <li>Increases accountability, reduces illegal activities and corruption</li> </ul>
ESO4: Design strategies and revise policies to address the impacts of internal and external social conflicts on forest resources	<ul style="list-style-type: none"> <li>Designing strategies and implementing forest resource utilization and management guidelines in refugee and IDP areas</li> </ul>	<ul style="list-style-type: none"> <li>Strict regulation and control of resource utilization in internally displaced people (IDP) and refugee areas will create opportunities for alternative livelihoods</li> </ul>
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced	<ul style="list-style-type: none"> <li>Ensuring equity and fair distribution of resources will reduce the dependence on</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring equity improves access to social services (education, health, clean water,</li> </ul>

<b><i>Suggested Enhancement Strategic options</i></b>	<b><i>Environmental Benefits</i></b>	<b><i>Social Benefits</i></b>
development opportunities	natural resources and avoids the risk of deforestation and degradation	inputs, finance, etc...) <ul style="list-style-type: none"> <li>• Improves governance and democracy</li> </ul>
ESO6: Ensuring fair and balanced allocation of resources to the sector	<ul style="list-style-type: none"> <li>• Providing the required financial resource to the forestry sector will improve policy implementation, law enforcement and enhance protection and conservation of forest resources</li> </ul>	<ul style="list-style-type: none"> <li>• Financial capacity will increase employment opportunities in the sector and will also increase the contribution of the sector the national GDP</li> </ul>
ESO7: Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> <li>• Regulating and managing population growth will reduce the risk of expanding agriculture to marginal and forest resource areas</li> </ul>	<ul style="list-style-type: none"> <li>• Measures that facilitate family planning in areas of high population density, especially in forest areas will improve quality of life</li> </ul>
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	<ul style="list-style-type: none"> <li>• Reducing the rate of in-migration from internal and external sources to the forest regions reduced the rate of deforestation and forest degradation</li> </ul>	<ul style="list-style-type: none"> <li>• Controlling spontaneous migration of people from inside and outside the country to the forest areas to avoid social conflicts and competition over resources</li> </ul>
ESO9: Ensure a well regulated and managed resettlement program	<ul style="list-style-type: none"> <li>• Revising the policy and enforcing implementation guidelines on resettlement spare forestlands from being used for resettlements and reduce deforestation</li> </ul>	<ul style="list-style-type: none"> <li>• Resettlements are implemented as per the agreed principles and procedures of the complementary RPF</li> </ul>
EOS10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> <li>• Providing environmental education to communities will reduce the degree of deforestation, forest fires, and agricultural clearing</li> </ul>	<ul style="list-style-type: none"> <li>• Increased local community awareness on the intergenerational and ecosystem wide benefits of forests</li> <li>• Increased awareness on the environmental, economic and social values of forests and their habitats</li> </ul>
ESO11: Implement radical measures to stop the root causes of corruption	<ul style="list-style-type: none"> <li>• Reducing and stopping the practice of corruption in the sector and in the other sectors will reduce the rate of deforestation</li> </ul>	<ul style="list-style-type: none"> <li>• Zero tolerance to corruption will nurture good governance in forest management</li> </ul>

## 10.6 Potential environmental and social risks of the proposed Enhancement Strategic Options and mitigation measures

Table 25: Analyses of environmental and social risks of the proposed Enhancement strategic options and the mitigation measures

<b>Enhancement Strategic options</b>	<b>Environmental</b>		<b>Social</b>	
	<b>Risks</b>	<b>Mitigation measures</b>	<b>Risks</b>	<b>Mitigation measures</b>
ESO1: Diversifying local Livelihoods to non-forest based Options	<ul style="list-style-type: none"> <li>The non-forest based options might lead to increased need for wood products and land, which might indirectly increase the risk of deforestation</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>The uneducated and disadvantaged groups of the community might be left out from the opportunities</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Ensure inclusiveness and support activities with community's needs and interests</li> <li>Options should provide priorities to the needs of forest dependent communities.</li> <li>Provide the necessary training and awareness on proposed alternatives</li> </ul>
ESO2: Promoting pro-poor development plans and targeted measures to reduce poverty (to benefit the poor segment of society)	<ul style="list-style-type: none"> <li>Development plans and programs targeting the poor could lead to more exploitation of resources, especially forest resource</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Development opportunities are often end up benefiting the resource rich and the elite groups</li> </ul>	<ul style="list-style-type: none"> <li>Put in place a mechanism to ensure the resource poor and the disadvantaged groups are targeted and included</li> </ul>
ESO3: Promoting participation and empowering of underserved	<ul style="list-style-type: none"> <li>Delegating power without the checks and balances may lead to corruption and further</li> </ul>	<ul style="list-style-type: none"> <li>The REDD+ management arrangement is also encompassing the regional states level REDD+ units,</li> </ul>	<ul style="list-style-type: none"> <li>Misuse of power might favor few members of the community and lead to illegal activities</li> </ul>	<ul style="list-style-type: none"> <li>Fair representation and accountability should be ensured</li> <li>Social groups from the</li> </ul>

<b>Enhancement Strategic options</b>	<b>Environmental</b>		<b>Social</b>	
	<b>Risks</b>	<b>Mitigation measures</b>	<b>Risks</b>	<b>Mitigation measures</b>
communities	degradation of the resources	regional steering committee and regional technical working group have been functional in Oromia region, with representatives from the forest		underserved communities need to be equally represented
ESO4: Design strategies and revise policies to address the impacts of internal and external social conflicts on forest resources	<ul style="list-style-type: none"> <li>• Lack of implementation of such policies further increase rate of deforestation</li> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure guidelines on resource utilization are implemented and seriously followed</li> <li>• Establish inter-regional coordination and operational framework when conflicts happen and result in displacement of people</li> </ul>	<ul style="list-style-type: none"> <li>• Leniency by local groups towards displaced persons and indifference to the destruction of resources</li> </ul>	<ul style="list-style-type: none"> <li>• Impartiality in implementation of the strategies and strict control over incompletion is needed</li> </ul>
ESO5: Ensuring fair distribution of resources among citizens through fair and balanced development opportunities	<ul style="list-style-type: none"> <li>• High disparity in income and increasing gap between the haves and have-nots will result in increased reliance on forest resources for income</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure wealth is fairly distributed among citizens and trickled down to the poor through services provision and taxation</li> </ul>	<ul style="list-style-type: none"> <li>• High taxation may discourage investment and slow down development, causing increased unemployment</li> </ul>	
ESO6: Ensuring faire and balanced allocation of resources to the sector	<ul style="list-style-type: none"> <li>• Lack of resources results in poor management of forest resources. Sufficiently available resource increases</li> </ul>	<ul style="list-style-type: none"> <li>• Allocate sufficient resource for the sector and consider the potential of forestry for the growth of GDP in the country</li> </ul>	<ul style="list-style-type: none"> <li>• Other social sectors (health and education) might be constrained and the growth of those sectors might be affected (financially and</li> </ul>	<ul style="list-style-type: none"> <li>• Base resource allocations on proper analysis of the development needs, the gaps and priority level of the particular sector</li> </ul>

<b>Enhancement Strategic options</b>	<b>Environmental</b>		<b>Social</b>	
	<b>Risks</b>	<b>Mitigation measures</b>	<b>Risks</b>	<b>Mitigation measures</b>
	capacity to stop illegal activities		human resource)	
ESO7: Implementing actions to regulate the high rate of population growth, including policy review	<ul style="list-style-type: none"> <li>Absence of sufficient labor might also affect forest management and protection activities</li> </ul>	<ul style="list-style-type: none"> <li>Strategies should take into account specific local conditions and population dynamics, needs and availability</li> </ul>	<ul style="list-style-type: none"> <li>Some religious and social groups might oppose the moves</li> <li>Controlling population might reduce labor force</li> </ul>	<ul style="list-style-type: none"> <li>Support implementation with sufficient awareness creation trainings and through full participation of social groups</li> <li>Interventions take into account local needs</li> </ul>
ESO8: Implement measures that regulate in-migration to forest regions (refugees, IDPs and squatters)	<ul style="list-style-type: none"> <li>Controlling in-migration may increase pressure in affected areas (e.g., drought) leading to resource degradation</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate Drought and land degradation affected areas for development potentials before out-migration</li> </ul>	<ul style="list-style-type: none"> <li>The resource poor and the weak might not be able to make ends meet</li> </ul>	<ul style="list-style-type: none"> <li>The necessary support should be provided to the poor in areas where out-migration is discouraged</li> </ul>
ESO9: Ensure a well regulated and managed resettlement program	<ul style="list-style-type: none"> <li>Unplanned and unregulated resettlement results in extensive deforestation</li> </ul>	<ul style="list-style-type: none"> <li>Ensure resettlements are implemented using approved guidelines on land and resource use</li> </ul>	<ul style="list-style-type: none"> <li>Absence of guidelines and exertion of pressure on resettled communities lead to social conflict</li> </ul>	<ul style="list-style-type: none"> <li>Ensure proper guidelines are put in place</li> </ul>
EOS10: Ensuring communities have the right and positive attitude towards forests	<ul style="list-style-type: none"> <li>Negative attitude towards forests being seen as harboring pests leads to deforestation</li> </ul>	<ul style="list-style-type: none"> <li>Educate local communities on the wider ecological roles and benefits of forests</li> </ul>	<ul style="list-style-type: none"> <li>Changing attitudes may antagonize local values and beliefs for some groups</li> </ul>	<ul style="list-style-type: none"> <li>Take into account and work through social values and beliefs when teaching</li> </ul>
ESO11: Implement radical measures to stop the root causes of corruption	<ul style="list-style-type: none"> <li>Corruption may not easily be stopped unless systemic measures are taken and thus the moves might even aggravate further deforestation</li> </ul>	<ul style="list-style-type: none"> <li>Measures need to stem from root sources and actions be systemic than case treatment</li> </ul>	<ul style="list-style-type: none"> <li>Measures might disfavor or favor certain social groups</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that measures are applicable regardless of status, power, or connections</li> </ul>

## 11. Observations and Recommendations

### 11.1 General

The REDD+ program has full package of the right instruments (i.e. SESA, ESMF, RPF, PF, CCP, GRM, D-DD and Legal and Institutional Study) 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 closures for environmental rehabilitation and biodiversity restoration. In some cases, farmland 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 sources (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.

## **11.2 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 Ethiopian Roads Authority, the Ministry of Transport, and the Ministry of Mines in order to have accurate estimates of the destruction and to avoid such destruction in the future as well. This also requires joint planning and implementation among the respective institutions.

Invasive alien species (IAS) 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 needs to be revisited and strengthened 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.

## **11.3 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.

#### **11.4 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 to 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 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 MEFC 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 Benishangul-Gumuz 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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## 13. 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 to-wards 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.

##### 2. 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;

### **3. 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:

1. Identify the key REDD+ social and environmental impacts emerging from the SESA analyses and

consultations.

2. 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+.
3. Identify, analyze, evaluate and mitigate/enhance impacts of policy options so as to maximize the positive impacts and avoid or minimize the negative ones.
4. Present recommendations for REDD+ policy design, implementation, and monitoring and evaluation (including legal and policy reforms) based on the results of the SESA.
5. Formulate policy recommendations for a policy framework to address key environmental and social impacts, and for addressing institutional and governance weaknesses.
6. Identify any gaps in knowledge where additional data-gathering and analysis may be needed.
7. Refine REDD+ Strategy options as outlined in the Ethiopia R-PP.
8. 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,

1. Preparation for the SESA;
2. Collecting and analyzing baseline;
3. Scoping;
4. Developing alternatives;
5. Assessing the alternatives;
6. 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.

#### **1. 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.

## **2. 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.

## **3. 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 prepared to record these findings to inform the remaining stages of assessment.

## **4. 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.

## **5. 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.

## **6. 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)**

## **1. 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:

- (i) In-depth voluntary consultations with concerned stakeholder groups to seek their broad support;
- (ii) culturally-appropriate capacity building measures;
- (iii) Environmental and social impact screening, assessment, and monitoring; and
- (iv) 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:

- a) Indicative REDD+ strategy option(s), its main social and environmental considerations, and the various risks involved in its implementation;
- b) 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;
- c) 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;
- d) Arrangements for implementing the specific activities.

e) 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:

1. **Environmental Management Framework (EMF)** to address any potential environmental impacts and necessary mitigation measures;

2. **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	
			LemlemTerara	208019	1402314	
	Awi	Banja-Shikudad/ Kosober	Askuna abo	250534	1215129	
			Senkessa	254418	1213287	
Benihangul- Gumuz	Asosa	Bambasi	Mender 40	694140	1095181	
			Mender 42	670424	1067037	
	Asosa	Asosa	Amba 14	669115	1112816	
			Amba 17	668795	1096227	
Gambela	Anuak	Abobo	Okunu	678274	871991	
			Chobo Ker	672822	871954	
	Mezenger	Godere	Goshine	727173	812551	
			Gelisha	750933	821595	
Oromia	KelemWollega	Anfillo	Ashi	685759	956722	
			Duli	683836	957000	
	Illubabor	Yayo	Gachi	692982	1084304	
			Wabo	696472	1085436	
		Didu		Gordomo	779796	883239
				Kochi-Gechi	777730	877020
	Bale	Harena Bulk	Shawe	575138	710914	
			SoduWelmel	571293	710622	
		Dinsho (BMNP)		Hora Soba	586779	784856
				Zolo-Ababo	582558	785464
	West Arsi	Dodola	Deneba	519526	768382	
			Berissa	525233	772244	
	Jima	Gera	GuraAnfallo	193448	844807	
			Genji Chella	197933	857216	
	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	

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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 by Regions**

#### **Oromia Regional Level**

The regional level consultation held at Oromia indicated that control over the use and access rights of estate forests and their management system is very loose except in OFWE concession areas. This has led to public perception that Regional Forests are free resources with open access to everyone. This public perception has exposed forest resources of the region to the impacts of “the tragedy of the commons” as mentioned by the participants. According to the information extracted during the consultation, the absence of clearly demarcated and gazetted boundaries has exacerbated the problem and added up to further forest resource abuses. The ever increasing scarcity of land resource 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. The discussant further mentioned that the problem of free access to estate forests and encroachment of forested landscapes for cultivation, grazing and settlement is very closely allied to the lack of public participation in the process of demarcation, zoning and managing of designated Regional Forests.

Plantation forests that were established during the Derg Regime (1974-1991) in the region are also facing a problem. The protectionist view of the then government had given the regime a chance to establish and maintain large area of plantation forests that has lived to date. However, the lack of active public consultation and participation of local communities, many of these plantation forests were poorly established, rarely maintained and are in the verge of total death due to die back and old ages. The lack of genuine public consultation and active local community participation during the establishment of the plantation forests has also led communities to eradicate the plantation in some parts of the region during the fall of the Derg regime. Thus, for sustainable implementation of the REDD+ programs, due attention need to be given for consultation, participation and engagement of all stakeholders and particularly local communities.

During the consultation with Oromia Agriculture Bureau and Land Use and Environment office it has been emphasized that, to safeguard the natural environment particularly protection of loss of the natural forest resource intensive and frequent consultation with local community should be exercised as an instrument prior to commencing the implementation of REDD+ programs. This is particularly important in areas where the highest forest losses occur (e.g., Jimma and Illubabor Zones) and where high population pressures (e.g., Jibat forest) exists. According to the information obtained from the office forest areas of Bale and Borena zones have been identified as low population pressures and low encroachment areas.

During the consultation with government office using fuelwood as source of energy by the rural households has been mentioned as one of the major problems for forest degradation in the region. The overdependence of landless individuals and households of the region towards selling of fuelwood and charcoal to support their livelihood has added up to the problem of deforestation and forest degradation. These landless individuals and households are forming the nucleus of fuel wood collectors and sellers.

In the low land Combretum-Terminalia woodlands of the region, agro-pastoralism and shifting cultivation are identified as dominant livelihood and land use systems by the contacted regional key informants. According to the key informant the low land pastoral and semi-pastoral communities use the woodland forest as feed and fodder resource for their livestock. Recently, these woodlands are being converted to agricultural lands due to the relative increment in lowland population and the regional governments program to convert pure pastoralists to agro-pastoralist. According to the key informants, the suitability of these low land areas for large scale agricultural practices has also contributed for large scale deforestation and forest degradation of woodlands allocated for investors coming into the region. This conversion of wood land into agricultural lands coupled with loose control of the delegated institution of the region to safeguard the woodland resource has exposed the remaining forest resources of the low land parts of Oromia for further deforestation and forest degradation.

Concerning the forest resource of the region the key informants at different level explained that the vegetation resource of the region include: Upland Dry Evergreen (*Juniperus procera*) Woodlands, Mixed Juniper-Podocarpus Upland Evergreen Forest, Humid Upland Broadleaved Forest (with Podocarpus) of Bale and Borena form a relatively contiguous block of “closed” and “dense” forest in the region. Combretum-terminalia and Acacia-commiphora woodlands dominantly cover the lowland vegetation system of the region.

The *madda* system (a customary grazing land management system) practiced by the lowland pastoral and semi-pastoral communities as a good practice that should be scaled up to protect forest resources in the area. *Madda* is a defined grazing area associated with well groups that the pastoralists use to fetch water for their livestock. In the past, the territory and the boundaries of the *madda* may have been more implicit than explicit, with entry to the territory of the *Madda* being controlled through the access to the deep wells. The access and use right of the water wells is highly controlled by the *Gum Gayu* Council and so is the natural resource within the *Madda* boundaries.

Information obtained from the Ethiopian Wildlife and Conservation Authority key informants shows that Oromia Region has three National Parks, two Wildlife Sanctuaries, two Wildlife Reserves and seven Controlled Hunting Areas. The three National Parks are Bale national Park, Awash National park and Rift Valley national Park. Senkele and Yabello are the wildlife sanctuaries. The Wildlife reserves are situated in Awash West and Bale areas. The control hunting areas include Arsi, Awash West, Arbagugu, Bale, Borana, Boyo Swamp, and Dabus Valley. According to the informants the only legally gazetted national parks in the region are the the Awash National Park and the recetnly gazetted Bale Mountains National Park. Management plans have been prepared for the Awash and the Bale Mountain Natrional Parks. Human settlement and/or permanent grazing practices are carried out in all the national parks. In terms of tourist infrastructure, the Awash and Bale Mountains National Parks are the best endowed. The Sankele Sanctuary suffered considerable loss of its population of *Swaynes Hartebeest* during disturbances immediately after the fall of the previous government. Only the Bale Mountain NP and the Yabello Sanctuary contain significant size of forest. In Yabello Sanctuary the dry Juniper forest is being cut down by the local communities particularly to sell juniper timber that will eventually illegally be exported to the neighboring Somali.

In all the wrap up discussions held with contacted key informants it has been understood that the intervention of REDD+ in the region will help sustain management and biodiversity (flora and fauna) of protected areas as well as increase the forest cover of the region.



Plate: Consultation with experts of different Oromia Agricultural Office

### **Dodola Woreda Consultation**

Consultation in Dodola Woreda focused on Participatory Forest Management (PFM). According to the information obtained during consultation, participatory forest management system called WAJIB ('Walda Jiratotaa Bossonaa': abbreviation for Forest Dwellers Association) has been implemented for the last 15 years since 2000 European calendar with the support of Nongovernment and Government organization. WAJIB make an effort to manage the forest resource through creating forest Dwellers Associations of up to 30 households in a group on 400 hectares of forest block. It was learned that more than 34,000 hectare forest land has been managed under 77 forest WAJIB groups in 77 forest management blocks. According to the discussant WAJIB helped natural regeneration of the forest, reduced impact of livestock on recruitment of seedlings and created legal selling of forest products. WAJIB has also created diversification of income for its members by selling of forest and non-forest product and initiated enhancement of ecotourism. The participant has explained that their Woreda is pioneer in establishment of PFM in the country and now different forest dependent community of the country who opt to establish PFM in their respective region are coming to Dodolla to get practical lessons and share experience. Currently the WAJIBS are organizing themselves into higher forms of organizations that participate in business forms that are environmentally friendly and diversify their income. Accordingly, forest cooperatives, tourism service provider cooperatives and union have been established.

Focus group discussion with WAJIB members and non WAJIB members implied that implementing WAJIB approach is significant for sustainable management of the forest resources particularly on rehabilitation of the degraded forest land and micro climatic modification. However, during the discussion with key informant of non WAJIB members it has

been found that benefit restriction is attached to members and that they are not allowed to cut and carry grasses as well as to pasture their livestock in the forest area. In addition, thenon-member of WAJIB criticized that part of their grazing land is now included into the forest area and are lacking space to keep their animals. The key informant from the non WAJIB member further explained that the right exercised by members to sell grass resources collected from the PFM forest to the non WAJIB community members and the right of WAJIB members to cultivate lands in the outskirts of WAJIB boundaries where it borders non WAJIB local community members is becoming a major source of conflict.

Some participants of the discussions who are members of WAJIB have expressed their concern that the limited carrying capacity of the forest under WAJIB system may not sustain the increasing population pressure and the growing livestock population of member communities. Thus, it was suggested that a different approach is needed to accommodate the emerging problems of benefit sharing. They further underscored that before implementing, PFM as an intervention strategy at a country level for REDD+ programs, such challenges in the PFM need to be addressed seriously. They also expressed their hope that the REDD+ carbon benefits may help solve the problems related to PFM by diversifying income generation schemes.



Plates: Dodolla Woreda Participants

### Gera Woreda Consultation

Gera Woreda is one of the sample Woredas selected for SESA study. The Woreda is found in West of Oromia and the discussant at Woreda level explained that about 56.45% of the total cover of the Woreda is covered by natural forest. Garanaso, Gura Afallo, Amina Dacho, Walla and Chala Kebeles are the specific location where the forest resource found.

During the consultation they explained that the local community in Gera Woreda has established forest management system called WaBuB. WABuB is an abbreviation for “Walda Bulchiinsa Bosonaa”, meaning “Forest Management Association”. WaBuB is also used as an administrative area 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 OFWE. The members of the WaBuB are thereby granted an exclusive right to use forest products within the demarcated forest area defined in the FMA. During the discussions, it was learned that before the start of community participation in Gera forest priority area through WaBuB, the initial intervention of the government for demarcating the forest area has been carried out without involving local communities, denying them use and access right to forest resources. This resulted in the decline of the forest resource of the Woreda due to illegal cuttings and encroachments by local communities around the forest.

The participants of the consultation workshop further explained that WaBuB has different components that support livelihood of the forest dependent community. They promote sustainable forest coffee production among WaBuB members who collect forest coffee and produce garden coffee. WaBuB also promotes diversification of land use through agro-forestry practices.

Participants of the Woreda consultation pointed out that lack of sufficient consultation and awareness creation on the basics of PFM with the whole community during the initiation of WaBuB as PFM system is causing conflicts with villagers who are non-WaBuB members in the areas of benefit sharing and use and access right. It was suggested that series of consultation with village leaders, community elders and other key persons in the village must have been properly conducted in order to obtain their supports to the project activities. Thus, for proper implementation of REDD+ programs consultation process should make sure that the whole forest community, village leaders and community elders and other key persons have understood the subject matter of PFM and its attributes in connection to carbon enhancement and carbon financing.



Plate: men FGD (right), youth FGD (Center) and women FGD (right)-Gera Woreda

### Jibat Woreda Consultation

Jibat Woreda is found in the western Shoa of Oromia Region. In the consultation participant said that the forest resource of the Woreda consists of high land bamboo and a large remnant forest that covers 22,173 hectare. In the year 2013/14, it has been reported that out of the total natural forest 11,173 hectare has been covered by high forest and 11,000 hectare has been considered as woodland. Included in the high forest report it was found that 800 hectare is government protected plantation forest.

According to the participants, deforestation and forest degradation exists in the Woreda as a result of agricultural expansion, illegal settlement from neighboring Woredas, infrastructure expansion, fuel wood collection and road construction. Limited participation of the community members has been mentioned as a problem in conservation initiatives such as participatory forest management. The local administration and community have no rights over the utilization of the existing natural forest in the Woreda. They said that, granting such a right will help to control the illegal settlements by the local communities themselves.

The partaker of the consultation pointed out that the large portion of forest in the district is owned by government enterprise and major decisions concerning the utilization of forest and forest products emanate from regional government body. The role of the local community and the Woreda administration is limited to assisting the implementation of the decisions of the higher government body. OFWE is trying to control deforestation by hiring forest guard and this does not create significant change on saving the forest. Participants of the consultation further explained that OFWE need to support the district community directly and indirectly from forest products but the enterprise is not doing so except providing temporary employment opportunity for group of people during planting and harvesting activities of the forest enterprise. The community gets seedlings from district owned nursery for planting on their own and communal lands for private and common utilization. In general, there is no participatory forest management practice in the district. So, REDD+ need to implement a full flagged PFM to sustain the forest resource in such kind of Woredas with ample forest resources.



Plate: Key informant interview (right), and men FGD (middle & Left)-Jibat Woreda

### **Yayu Woreda Consultation**

Information gathered from the Woreda Agricultural office shows that Yayu forest is one of the 58 forest priority areas delineated for forest conservation with an area that covers over 150,000 ha. Accordingly, most of the forest areas were set aside for conservation; and local communities were only allowed to extract non-timber forest products like honey, spices and coffee, without practicing any management interventions. Yayu forest area has been identified as a Cultural Heritage by Oromia State Bureau of Culture and Tourism.

Parts of the Yayu National Forest Priority Area along the Geba and Dogi rivers has been demarcated as Geba-Dogi Forest Coffee Conservation Area and conservation activities commenced since 2003 with EU financial support through the 4<sup>th</sup> phase of the Coffee Improvement Program (CIPIV). The current proposed biosphere reserve area covers most parts of the Yayu National Forest Priority Area, including the Geba-Dogi Coffee Forest Conservation Area. Communal lands of about 85,000 hectares have also been declared a UNESCO MAB reserve area. It has been the belief of the consultation participants that Yayu forest in addition to its benefit serving as home for flora and fauna, the establishment of the Coffee Forest Biosphere Reserve would play an essential role in the preservation and further exploration of the cultural and religious sites with their associated social and economic values.

The core areas are known to be a dwelling place for wild Arabica coffee and high species diversity and represents relatively intact forest of high conservation value for coffee and forest biodiversity as explained by the informants. Access restriction is very strong in these core areas except for research and monitoring purposes. In the future the restriction of use right in the area may create conflict among the different stakeholders as indicated by participants during the consultation. Worries has also been raised in areas where roads pass through forests of the core area, a buffer zone of at least 400 meters width that has been left on both sides of the roads could be exposed to degradation due to potential human impact in the long-run.

They further explain that the second part of the biosphere which is managed by the local people is mainly used for coffee, honey and other forest related productions. The third portion of the reserve is called transition area that represents an area of the biosphere reserve where sustainable development is promoted for the improvement of the livelihoods of the local community. In the transition area the biosphere reserve includes coffee home gardens, agricultural land, grazing land, and others. These areas are under serious human impacts. Therefore, to attain the major objective of the transition zone it requires devising integrated livelihood management system in consultation with local community to avoid leakage in the reserve areas.

The key informant in the Kebele and members of the FGD clarified that the major threat of the forest resource in the Woreda are agricultural expansion and coal mining for the future fertilizer industry which is under construction by the central government. Illegal logging and expansion of coffee plantation has also been considered as source of forest degradation. Environment Coffee Forest Forum, a local nongovernmental organization working on environmental issue related to climate change, is in the process of designing REDD+ project in Yayu forest. The project aims to avoid deforestation and forest degradation parallel to promoting carbon stocks conservation and enhancement (REDD+), coffee genes and forest

biodiversity conservation and poverty reduction through the creation and implementation of conservation areas through the strengthening of OFWE and community based organizations. Rural communities in the area. The key informant at kebele explained that the rural community are dependent on the forest for coffee, honey, and annual crops production.



Plate: Yayu Woreda participants

### Harena Buluk Woreda Consultation

In Harena Buluk Woreda a consultation was held with experts working in the Woreda natural resource management, Woreda police, Woreda land use planning, livestock agency, irrigation, energy and mining, Woreda administration, women affairs, security affairs and NGO's working in the Woreda. OFWE and NGOs are supporting the community to implement PFM in the Woreda. However, the discussant explained that the forest resource administered by OFWE in the Woreda have no forest management plan. Continuous awareness raising programs on drivers of deforestation and forest degradation, watershed management, loss of biodiversity, and consequences of climate change have been presented to communities. In the Woreda there are 14 forest cooperatives and all stakeholders will involve in the planning process. Forest fire occurred in the Woreda seldom but it creates huge damage on the forest diversity. As partakers stated, in the Woreda there is no fire management plan as well as facilities to cease fire. But the Woreda natural resource experts and NGOs are creating awareness on causes and methods of forest fire control and the community participate in controlling fire incidences.

In the Woreda the major source of household energy is fuel wood. However, additionally cow dung; kerosene and solar power are used by few people in the Woreda. According to the Woreda key informants the Woreda faces shortage of all energy types. People are aware of the benefits of improved stoves but there is limited distribution of these technologies to the community. SOS Sahel/Farm Africa and FZS are the nongovernmental organizations that work in the distribution of improved stoves to the Woreda communities.

Continuous awareness to cease illegal encroachment into the surrounding natural forest is given by the Woredas experts to the Woredas community as explained by the Woreda consultation participants. So far persons who have been caught involved in illegal tree cutting or found supporting such illegal activities have been punished based on the articles in the law (as per the regional forest proclamations). The Aba Geda Elders also play significant role in resolving conflicts in the woreda. According to the Woreda key informant, the Woreda has the capacity to implement the REDD+ programs, and the experience and the trained personals with very good commitment in the Woreda has been presented as evidences of the woredas commitment for REDD+ implementation. In this particular Woreda, women and youth are involved in natural resource management for the last four years. They are also participating in watershed management works and also in livelihood improvement activities. **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. Traditional institutions of that work forest management also exists in the Woredas. 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.

During the consultation period the falling coffee prices has been identified as one of the major problems that hindered the capacity of farmers to purchase agricultural inputs to intensify their produces. Lack of good all weather roads in the Woreda have also been mentioned by farmers as a reason that prevented coffee producers from selling their products in better markets. The decrease in price of coffee and other agricultural products lead farmers to plant more coffee seedlings at the expense of forest.

Finally, the participants of the consultation concluded that the presence of local community that are willing to participate, the availability of awareness creation programs in the Woredas by the experts, and the commitment to protect their natural environment and address environmental problems can be considered as social capital that may facilitate the implementation of REDD+ programs in their Woreda.



Plates: Harena-Buluk Woreda Participants

### Odo-Shakiso Woreda Consultation

Odo-Shakiso is one of the Woredas of the Guji Zone in Oromia Regional State. The Woreda is known to have two livelihood zones identified as the maize, wheat and livestock and coffee and enset zones. Agro-pastoral or agricultural practices are dominant livelihood styles in the coffee and enset livelihood zone due to the presence of good precipitation while the maize, wheat and livestock livelihood zone is reported to experience shortage of rainfall. Drought is recurrent in this particular zone; hence the communities move their livestock to the forest during peak dry season. This tradition of livestock mobilization is locally known as Godaansa or Darabaa. Most of the times, the communities in the maize, wheat and livestock livelihood zone live on the safety net program sponsored by the federal government in association with local NGOs.

Odo-Shakiso is well known for its rich alluvial gold deposits and mining that attracts a number of fortune seekers from neighboring districts and regions. Laga Dembi gold and Kenticha tantalum are two big mining projects running in the forest of Odo-Shakiso. Whenever the fortune seekers become unsuccessful in mining, they turn their faces to the forest for settlement and alternative income generation activities like selling of forest and forest product.

This is believed to eventually exacerbate the problem of forest degradation and deforestation as described by the discussants.

Coffee and enset (*Ensete ventricosum*) are the two cash crops planted in the forest. The coffee management system is contributing for forest degradation while the enset based livelihood activity is a cause of deforestation in the Odo Shakiso Woreda. Frequent wildfire has also been reported as a source of forest degradation in the woreda. Forest fire that occurred in 2000 and 2008 had destroyed large forest areas, traditional beehives, coffee trees and enset which eventually displaced forest dependent communities from their living area.

The major drivers of deforestation and forest degradation in the Woreda are agricultural land expansion, settlement, fuel wood collection, charcoal production, migration for traditional gold mining, investment, illegal tree cutting and timber logging, forest fire and weak legal enforcement. Fire wood collected from nearby forest and charcoal productions are the most important sources of energy and household income. In addition selling of wood and wood products has been reported as means of income for the poorest members of the community, landless youths and women. Illegally tree cuttings from the nearby forests area and supply large quantity of timber products to urban and rural dwellers via the nearby markets is carried out by these groups of the community.

Causes of forest fire in the Woreda are usually anthropogenic. Frequent forest fire incidents have been recorded in the Woreda which led to loss of thousands of hectares of forests. One of the major drivers for setting forest fire by local community members is the desire for expansion of agricultural land through slash burning. Settlers from Eastern part of the Woreda have significant impact on the forest due to shifting cultivation. Thus, awareness creation and monitoring is required to make the settlers live in harmony with the forest resource as suggested by consultation participants. Additionally the discussants stressed that addressing the problem of deforestation and forest degradation need to consider reducing the livelihood problems of the poor members of the community.



Plates: Odo-Shakiso Woreda Participants

## Dinsho Wereda consultation

Bale Mountains National Park is located in Dinsho Woreda. The National Park is administered by Ethiopia Wildlife Conservation Authority. The key informant from the park explained that the community members who live in and outside the park are benefiting from the park through involving in income generating activities such as guiding tourists, horse rents, and sell of cultural handicrafts. Some part of the park community members also benefit from selling of fuel wood and preparing food for tourists. Generally the communities in and around the park are organized in 200 cooperatives and 6 union groups. As the key informant from the community member explained there is a community owned forest outside the park boundaries. The forest owned by the community is found in the form of patches and the management approach used by the community is PFM and the implementation of the approach is supported by NGOs like Frankfurt Zoological Society (FZS), Farm Africa, Melka Mahiber and Ethiopian wolf conservation association.

The Park has developed a 10 year forest management plan in collaboration with FZS in 2005 which will phase out soon without being fully implemented due to various reasons. However, as per the information from the key informants, the plan will be revised through a participatory process including different stakeholders in the Woreda such as the local communities for full scale subsequent implementations. Resettlement issues may be considered in the revised plan to alleviate the problem related to squatter settlement. No complains have been reported during demarcation of the park area. There are people living in the park that are witnessed to live friendly by the park managers. Consultations made with settlers in the park elucidated that they have consented to resettle with compensation arrangements. But there is budget constraint for compensation as explained by the park managers. They also said that complaints can be appealed in judiciary system.

For the community forest NGOs are working on issues of PFM. The community is aware of the PFM process and has started getting benefit out of it even though the amount of revenue generated from tourism sector in the Bale area is too small. So far the elders in the community are playing a key role to protect any harmful activities that affect the forest. Scarcity of farm land forces local community to deforest the nearby forest for agriculture. However, now days such activities have stopped by enforcing the law and implementing community bylaws.

The traditional forest management practice applicable in the Woreda is the fear of the punishment of the 'Awlia' (a person believed to possess supernatural power).' Melkamahiber use the Awlia as an opportunity to protect the forest from any harmful activities. It was learned that people who follow the Awlia will not involve in such activities. Abakera and Arsedra are another traditional belief systems found in Meo kebele in the Woreda that are supporting activities that protect the forest.

According to the key informant from the park, the benefit sharing mechanism of the income generated from the park allocate 80% to the region and 15% to Federal and only 5% is shared to local community. But the law has not been exercised yet and the sharing need to be revised since the sharing of the benefit especially for the community is very low. Moreover, park need

to increase the number of tourists to generate more income and benefit the community. For effective REDD+ implementation in the Woreda the best agreed up on and acceptable benefit sharing scheme need to be put in place ahead as there are no such experiences in the Woreda before.

Forest fire is one of the major problems that threatens the biodiversity and stock of the natural forest in the Park. Recurrent forest fire hazards occur in the park due to deliberate setting of fire by the local people and drought in some cases. The most affected part of the park vegetation is the *Erica arborea* belt found in the heights picks of the mountains. Fire hazards are usually controlled by the support of the community, civil servants, MedaWelabu University students and others. There is no infrastructure to control and give early warnings of fire hazards except the guard houses built in few places. The forest plan which will be revised recently will include fire controlling and related issues. Properly addressing the issue is crucial to implement forestry programs including REDD+.

Major household energy sources in the Woreda are firewood. Cow dung, electricity (hydro power in Dinsho town for lighting), kerosene, solar power are also used by few people. People are aware of the benefits of improved cooking stoves. However, there is limited distribution of these technologies to the community except the distribution that is being carried out by Melka Mahiber and FZS.

Member of cooperatives are not generating enough money due to very low tourist flow in the area. They suggest that the tourist attraction should be strengthened and enhance their income. In order to reduce conflict consultation is conducted between different actors and the community and also NGO's such as FZS, Melka Mahber and the park create awareness on the importance of the park and the importance of coexistence of the community and the natural resource. As the discussant explained due to the continued consultation there is minimal illegal hunting and fuel wood collection in the park.

The participants of the focus group discussion in Dinsho Woreda, Hora Sobba and Zalo Ababo Kebeles understood forests as assets that endowed them with secure livelihoods. 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. There are both state forest and community forest in both kebeles. The communities have full authorities on community forest. Hence, the communities of both kebeles are able to control and make decision to take action when necessitated they strongly safeguard the forests.

However, since impoverished families and small land owners have little alternative income sources, these tend to encroach the forest in order to support their families. Local communities have the right to cut fallen and dead trees, hang beehives and collect medicinal plants. Voluntary participation of communities in different activities shows that the community lives in harmony with the park. Only few community groups who have little awareness and knowledge about PFM tend to be reluctant to involve themselves.

Members of cooperatives are getting some benefit from tourism activities in Dinsho, in the Bale Mountains National Park. So far no conflict has been noticed, and everyone has his/her own grazing and farm land. The conflict due to settlement in the forest between the park

management and some illegal settlers has been resolved according to the law and some local arbitration efforts of resolving conflicts through elders and the *Aba Geda*.

The participants are already knew about PFM have become part of the scheme. Hence, they believe PFM is acceptable and no risk if implemented. They are also willing to be engaged in intensive agriculture that is compatible to the climatic condition of their woreda though they are currently using chemical fertilizers and improved seed varieties. Some have mentioned that they are using improved cook stoves but the limitation is on the distribution of the technology and inability of some people to purchase the stove. They also knew substitution of their livestock with few quality breed increases their income and reduces the degradation of forests. Implementation of REDD+ project in the kebele makes women and impoverished groups beneficiaries through provision of women related technologies and sources of income generation projects.



Plates: Dinsho Woreda Participants

### Didu Woreda Consultation

Didu Woreda has a total area of 96,000 hectares. The traditional classification system divides the Woreda into two climate zones called 'Beda' and 'Beda-dare'. The Beda climatic zone covers about 35% and Beda-Dare cover 65% of the Woreda. Coffee is one of the major cash crop planted in the Woreda. The Woreda has 61 rural Kebeles and 1 Didu town kebele. In total about 6230 household is living in the Woreda and the total population is about 40,465.

Rivers such as Dibo, Gesso, Dale, Yubi, and Kobiya are attached with the communities' livelihood in the Woreda. As mentioned in the consultation the community uses the river for traditional irrigation to produce fruits and other root crops. They also believe that because of the presence of dense forest the Woreda experience higher rainfall distribution.

Concerning the forest resource of the Woreda the community explained that the forest resource is less than 14,000 hectare. The size of the forest is decreasing since the community collects fuel wood from the forest and settlement in the forest is increasing over time. The fauna resource of the Woreda is also decreasing along with reduction of the forest size as described by the Woreda key informants. Bee keeping is another potential source of income for the local community in the Woreda.



Plates: Didu Woreda Participants

### **Anchar Woreda**

The Woreda is located in the Oromia National Regional State (ONNRS), West Harerghe Zone. The total area of Anchar is 86,395.924 hectare. The total population of the Woreda is 98,500 with 47,935 females and 50,565 males. Dindin forest is the biggest forest found in the Woreda and administered by OFWE.

Dindin forest is found stretched over cover 47,662 hectare of land with 13,299 hectare natural forest, 135 hectare woodland, 34,048 hectare shrub-bushland and 150 hectare bamboo forest. The topography of the Woreda is so undulated with the forest found on top of mountains and the agriculture practiced in lower areas. The Woreda has five perennial rivers called Mole, Jiret, Abo Aliyi, Sidise and Itisa.

In the Woreda, there is high natural resource degradation and unsustainable utilization of forest resources. Other environmental problems indicated during the field assessment are forest fire, drying of rivers and springs and gully formation and siltation in the agricultural lands. Agricultural productivity is reported of decreasing due to soil degradation. The main drivers of deforestation and forest degradation in the Woreda are fuelwood collection, harvesting of wood for construction, expansion of agricultural land, extraction of timber, charcoal making and forest fire. Watershed management using mass community mobilization is being under implementation to harness the environmental problems of the Woreda though the participation of the community is reported low. Afforestation/reforestation efforts are also made to address the environmental problems. Seedlings are raised and contributed to the community for own garden and watershed areas planting by the Woreda Agriculture Office as well as OFWE. There is no participatory forest management (PFM) practice implemented in the Woreda.

There are reported cases when the community clashes with the OFWE staffs, particularly guards, over the illegal use and encroachment into the forest. The clashes were settled both

culturally and in government institutes (court). The community of the Woreda has indicated that OFWE is supporting them to the capacity it can but not to the extent they expect.

There is a need to enhance the awareness of the community to make them involve in addressing the environmental problems of the Woreda. Developing a sense of ownership over the Dindin Forest and putting in place a clear benefit sharing mechanism with the community are priority issue that need to be addressed before launching REDD+ project in the Woreda.



Plate: Wereda Consultation (left), Midegdu Kebele FGD (center) and Dindin Kebele FGD (right) –Anchar

### **Anfillo Woreda Consultation**

The Woreda has about 157,200 hectares of total area. Out of the total area 39,718.85 hectares is covered by high forests. Anfillo district is connected to Dembidolo by 42 km rural gravel road that passes via the dense forest and crosses to Gambella regional state. Coffee is one means and source of livelihood of the Woreda community.

Gergedda forest that comprises of natural and plantation is administered by OFWE. Regarding wild life, there are different species of wild animals in the district. Some of the major types mentioned by the discussant are Elephant, Lion, Leopard, Buffalo, Warthog, Bushbuck, Otter, Monkey, Ape, Duiker and Hyena. There are no reserved areas for wild life conservation in the district.

There are traditional and modern methods of soil conservation practices in the district. The traditional method includes composting, crop rotation, inter- cropping, fallowing early tillage, contour-plough and hand weeding and among the modern method terracing, weed control by chemical and using fertilizer are also usually practiced in the district. The implementation of the REDD+ program should consider and enhance the values of the traditional knowledge in the Woreda.

Concerning ownership of the forest, there is government owned forest run by OFWE and private forest. Although the communities around the forest play key role in protecting the forest from degradation, there is low participation in the decision making and utilization of the forest and forest products. The enterprise that was expected to support the districts' community livelihood is leaving no economic benefits from forest and forest products. Moreover, the Woreda administrative unit receives minimal benefits from the income that is generated from the forest. Group of people gets temporary employment opportunity during planting and harvesting activities conducted by the enterprise. The community gets seedlings from district owned nursery for planting on their own and communal lands. In general, there is

no participatory forest management practice carried out in the district. They also suggested that REDD+ should consider participating the local community in every steps of its project implementations to make the forest management sustainable in the woreda.

There has been forest degradation and pressure on the existing state owned forest in different ways especially expansion of agricultural land, construction, forest fire and charcoal making are the most serious ones that need attention and serious intervention. The privately owned forest doesn't suffer from these factors because they have proper safeguarding system in place by their respective owners. The only serious problem the owners of private forest experiencing is forest fire. They emphasized the availability of fire protection systems and facilities in the Woreda to avoid the problem. The national REDD+ program should consider addressing this problem in its implementation activities.

In the early times there has been negative perception concerning the forest and its resources, because farmers suffer from wild animals attack on their farm and welfare. Moreover, there is limited participation of the community in conservation initiative such as participatory forest management due to this reason. However, because of repeated intervention by the Woreda experts, attitudinal changes over the benefits of forests are growing in recent days.

With regard to ownership rights, the local administration and community have no rights over the utilization of the existing natural forest in the Woreda except the enterprise.

Currently the community is participating in forest management practices through PFM which is supported by NGO such as FARM AFRICA. Although this project is at its infant stage, it is trying to change the perception of the farmers to the forest resource in the district. The natural forest administered under PFM as Gerjida, which is in a promising condition at present. This forest also borders the neighboring Gidami Woreda.

There are five community groups organized by FARM AFRICA involving in the forest management process including protecting and utilizing of the forest under PFM. The focus is to engage the local community on sustainable utilization of forest coffee, and other NTFP production. According to the partaker of focus group discussion the project tries to involve the youth and women to benefit from the forest. The project also involve other stakeholders from various government offices. It formed a committee involving focal person from various administrative bodies such as agriculture office, youth and women affairs office, cooperative office and the like. The major activities of the project includes organizing working groups, delineating the forest boundary, mapping the forest area, establishing their own by-laws in how to implement their preservation utilization of the forest resources.

Concerning degraded land in the district, there is land that has suffered from sliding and the area has been delineated for soil and water conservation activities and community based intervention.

The implementation of participatory forest management will boost the productivity of farmers in honey, traditional medicine, and other uses as described by the discussants. They have also noted that lack of proper training and awareness might lead to deforestation and forest degradation. There has been a suggestion from key informants and Woreda officials that large or small scale plantation can benefit the local community by creating easy access to firewood and in reducing the burden on the existing nearby forests.

The source of energy for domestic purposes in the district mainly comes from fire wood. Six Kebeles including Mugi town utilizes electricity for lighting, but the voltage of the electricity supplied doesn't allow other heavy duty utilizations. Currently, there is small and micro enterprise producing and distributing energy saving stoves in the district. There are farmers who practice tree planting for the purposes of energy source. The local people are willing to work with indigenous and exotic tree species provided that the tree species are known to give better benefit and adapt to their micro climate.

The discussant at Woreda level emphasized that the provision of improved livestock and replacing animal tillage with mechanical tools will help reducing the pressures of livestock's on the natural environment. In order to implement this strategy, farmers must be given more extension support and subsidy for mechanical tools. In addition to this, trainings in the management of improved livestock and veterinary services must be made available along with fodder. During the implementation phase of the REDD+ programs these issues and needs of local community should get enough consideration under the framework of the various project implementation strategies.



Plate: Participants of consultation conducted in Mugi town, Anfillo Woreda

### 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 melanoxydon* 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.

### **Benishangul-Gumuz**

The land cover of the region is identified as cultivation, grassland, shrubland, 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 shrubland and woodland in the region. They also elicited that the lowlands have extensive areas of woodland and shrubland 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 shrubland. 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 landuse 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 system 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 are 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 are 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 shrubland 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.	woodland, shrubland and grassland are managed by traditional institution called Mada'aa
	Land management and ownership is by the clans of the community	
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
	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	Grievance between forest guards and community reported

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Region	Environmental situation	Social situation
	region	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.
	There is Participatory Forest Management introduced and run by FARM Africa	Animal husbandry is limited by Tse-tse fly
Gambella	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 also re causing forest degradation-pastoralists coming from neighbouring and other countries in search of grass and refuge the harsh climate	The livelihood of the community depends on fishing, wild meat hunting, Shea butter tree utilization and organic farming.
	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	
Oromia	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	Traditional grievance redressing mechanism is through Gadaa

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Region	Environmental situation	Social situation
	in the South East parts of the forest of the region highly affected the forest both in quantity and quality (deforestation and forest degradation)	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.
SPNDR	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
		It is the region that is most densely populated (more than 100 people per square)
Somal —	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.	The livelihood of the community is dependent on livestock husbandry (pastoralist community). Charcoal making as a livelihood business is becoming an attractive business. Chat

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Region	Environmental situation	Social situation
	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.	<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.
		Huge market for livestock and their products but there is acute market problem.
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.	Livelihood depends on agriculture and animal husbandry. Income from the NTFP (mainly incense and honey) supports people living near and adjoining the forest areas.
Tigray	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 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 security desk.
	No report of deforestation due to road infrastructure	

## Annex 5: Stakeholder Analysis Checklist



### SESA/ESMF/RPF/PF Study Stakeholder Mapping Checklist

Organization \_\_\_\_\_ Contact Person \_\_\_\_\_ Address; email \_\_\_\_\_

Signature \_\_\_\_\_

No	List of stakeholders	Type*	Why considered as a stakeholder	Category					
				Implementer	Contributor	Primary	Secondary	Key	Negative

- **Implementers** (people/organizations employed or assigned to implement & manage REDD+)
- **Contributors** (donors) & beneficiaries (benefit from or use, goods & services provided by REDD+)
- **Primary** (who gain material benefit from REDD+ or who make direct contributions of resources or services to REDD+)
- **Secondary** (intermediary in the implementation process of delivering REDD+ benefit & may make some gains or losses from their involvement)
- **Key** (who have significant power or influence to determine the direction and outcome of REDD+)
- **Negative** (who may suffer material losses or loss of influence)

\*: Government (Go), Non government (Ngo), Community based organization (CBOs), Private (Pr), Religious (R), Academia (Ac), Research institute (RI)

## Annex 6: Lists of Participants

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	"	"	
Agegnaw 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	"	"	

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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 Kechema
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	"	"	"
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	"	"	

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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	-	"	"	"
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	"	"	"

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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	"	"	
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	"	"	"

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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	"	"	
Zerihun Kelbi	Male	0910970655	"	"	
Belachew Abiko	Male	0911762508	"	"	
Alemayehu Gebre	Male	0924129522	"	"	
Tegenu Gizaw	Male	0919142182	"	"	
Wendmagegne Atimo	Male	0917331334	"	"	
Alemayehu Getachew	Male	0934268030	"	"	
Serkalem Muhie	Female	0912381671	"	"	
Ibtistan Getahun	Female	0935174309	"	"	
Messaye Mohammed	Female	091356029	"	"	
Sintayehu Muche	Female	0918641398	"	"	
Asefu Gizachew	Female	0918318725	"	"	
Almlesh Ejigu	Female	0917154225	"	"	
Aster Tsegaye	Female	0928255111	"	"	Giz Meret
Mulu Hasen	Female	0934788086	"	"	"

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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	"	"	
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	"	"	

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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	-	"	"	"
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/Samayyat	Male	0926509987	"	"	

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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
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	-	"	"	"

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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 Hagahiyi	Female	-	"	"	"
Yeshi Yesuf	Female	0937822645	"	"	"
Asefa Adeto	Male	0960959587	SNNPR	Arba Minch Zuria	
Kasahun Degeta	Male	0923859857	"	"	
Tamiru Tesfaye	Male	0916277771	"	"	
Asini Adamu	Male	0913849745	"	"	
Tobe Yemo	Male	0920977998	"	"	
Dawit Hencho	Male	0913604442	"	"	
Sisay Welda	Male	0910653060	"	"	
Addisu Getu	Male	0910413322	"	"	
Abel Boriza	Male	0910726809	"	"	
Hareguwa Tesfaye	Female	0916064142	"	"	
Muluken Gobena	Male	0910094177	"	"	
Degife Demisse	Male	0913066729	"	"	
Daniel Karma	Male	0926386616	"	"	
Solomon Wanke	Male	0934238843	"	"	
Bekele Amha	Male	0939808286	"	"	

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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	"	"	"
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	"	"	"

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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	"	"	
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	"	"	

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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 Hussien	Male	-	"	"	"
Umer Buta	Male	-	"	"	"
Hussien Roba	Male	0924327520	"	"	"
Husseinh/Mohammed	Male	-	"	"	"
Getaneh Asefa	Male	-	Gambella	Godere	
Kedir Yesuf	Male	-	"	"	
Sahle Biza	Male	-	"	"	
Tesfa Gefersu	Male	-	"	"	
Bekelech Tezera	Female	-	"	"	
Etaggnehu Chane	Female	-	"	"	
Bekelech Angelu	Female	-	"	"	
Mohamed Seid	Male	-	"	"	
Dejene Tarekegne	Male	-	"	"	
Tesfaye Abera	Male	-	"	"	

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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 Eqrurke	Male	-	"	"	"
Daniel Kuamila	Male	-	"	"	"
Yona Kamila	Male	-	"	"	"
Gorume Wodajo	Male		Oromia	Yayu	Wobo
Kebede Hordofa	Male	-	"	"	"
Teka Dabola	Male	-	"	"	"
Yadata Doba	Male	-	"	"	"
Fetene Bulcha	Male	-	"	"	"
Geremwe Nuru	Male	-	"	"	"
Firdi Kena	Male	-	"	"	"
Nuru Gebeyhu	Male	-	"	"	"
Adugna Gebeyhu	Male	-	"	"	"

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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	"	"	"
Meressa Geisa	Male	0917026616	"	"	"
Tesfaye Kebede	Male	0911756394	"	"	"
Tesfaye Yadesa	Male	0917025595	"	"	"
Fedesa Feyesa	Male	0912117086	"	"	"
Etenesh Abedeta	Youth	0932439106	"	"	"

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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	"	"	"
Mohammed Amin Almacha	Youth	0940567883	"	"	"
Teshome Gezahegn	Male	0917108302	"	"	Gura Afalo
Al Nega Al Dura	Male	-	"	"	"
Abdulqadir Al Gidi	Male	0927571357	"	"	"

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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 Algaro	Male	0935117901	"	"	"
Algidi Algero	Male	-	"	"	"
Ahimed Alfita	Male	0910203768	"	"	"
Abeba G/Senbet	Female	-	"	"	"
Fatuma Algaro	Female	-	"	"	"
Jimiti Almacha	Female	-	"	"	"
Aster Kefyalew	Female	-	"	"	"
Birtukan Tesma	Female	-	"	"	"
Asnaku Gebre	Female	-	"	"	"
Zeyneba Almecha	Female	-	"	"	"
Zahara Shehmohammed	Female	-	"	"	"
Hikma Yimam	Female	-	"	"	"
Fatuma Alsimal	Female	-	"	"	"
Zahara Alfosi	Female	-	"	"	"
Hawa Algero	Female	-	"	"	"
Kasahun Ketema	Youth	-	"	"	"
Kedir Altemam	Youth	-	"	"	"
Mudare Algero	Youth	-	"	"	"
Engeda Tefera	Youth	-	"	"	"
Nasir Temam	Youth	0933726418	"	"	"
Shifera Jiru	Male		Oromia	Didu	
Yesuf Mammo	Male		"	"	
Shafi Kedir	Male	0923347309	"	"	
Kebede Abdu	Male	0934256733	"	"	
Ebrahim Bazen	Male		"	"	
Asfaw Yebo	Male		"	"	
Birhanu Degafu	Male	0943211532	"	"	
Teka Zebenu	Male	0935174974	"	"	
Bayush Ashenafi	Female	0917340763	"	"	
Tsehaynesh Gelane	Female	0912754907	"	"	
Zara Zewde	Male	0919441139	"	"	
Nayime Sherif	Male	0932029353	"	"	
Ayana Guddeta	Male	0941519856	"	"	

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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	"	"	"
Taju Kedir	Male	09310698	"	"	"
Dessaiegn Befkadu	Male	0917276988	"	"	"
Birhanu Befkadu	Male	0917995787	"	"	"

SESA report for the implementation of REDD+ in Ethiopia

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 Tsehye	Male	0939233386	"	"	"
Nigusse G/her	Male	0939225336	"	"	"
Alek G/egziabeher	Male	0934202563	"	"	"
Guoush Giday	Male		"	"	"
Asmelash Behone	Male	092262081	"	"	"
Sahele Eredae	Male		"	"	"
Maesha Abay	Male	0914227976	"	"	"
Lemlem G/Silase	Femal	0964224287	"	"	"
Betre K/Mariam	Male	0933060568	"	"	"
Abreha H/Mariam	Male	0914278663	"	"	
Mebrhit G/Medhin	Female	0942666872	"	"	
Letealif G/Giorgis	Female	0914150746	"	"	
Worku Shiferaw	Male	0914222771	"	"	
Muze Hailu	Male	0914197683	"	"	
Birhan Teferi	Female	0913624150	"	"	
Birhanu Gidey	Male	0914020466	"	"	
Kidane Tadesse	Male	0914392979	"	"	
Haftu G/Wold	Male	0938136938	"	"	
Tsegaye Tsehaye	Male	0914212581	"	"	
Alemu Anagaw	Male	0914391816	"	"	

SESA report for the implementation of REDD+ in Ethiopia

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 Itey	Male	0914780962	"	"	"
Dawit Mamo	Male	0914109915	"	"	"
Kese Yadel G/Hiwot	Male	0914245573	"	"	"
Ymaneh Mahiri	Male	09387902	"	"	"
Hafity Grase	Male	0914571434	"	"	"
Kassay Gebire	Male		"	"	"
Gergis Berihe	Male		"	"	"
Atsbiha G/tkilay	Male		"	"	"
Kassya Hadus	Male		"	"	"
Giday Hailu	Male		"	"	"
Birhane Hagos	Male	0945503445	"	"	"
Giday G/Mariam	Male		"	"	"
Kahisa Hadera	Male		"	"	"
Hiodagi Birhane	Male		"	"	"
Kiros Kahissi	Male		"	"	"
Grmay Negusse	Male		"	"	"
G/Egziabher Hadera	Male	0914690585	"	"	"

SESA report for the implementation of REDD+ in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
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	
Hafta 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	--	"	"	
Kasa solew	Male	--	"	"	

SESA report for the implementation of REDD+ in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
Berihun wekl	Male	--	"	"	
Tikuay abohoy	Male	--	"	"	
Fantu yabgew	<b>Female</b>	--	"	"	
Tadla tarecke	Male	--	"	"	
Yishak girmay	Male	--	"	"	Muge Tabia
Gebeyehu Tsegaye	Male	0918301577	Amhara	Land admin. offi	
Awoke Yitay	Male	0918020079	"	"	
Endalkachew Naod	Male	0918085342	"	"	
Alemayehu Bekele	Male	0912104441	"	"	
Terefe Alemu	Male	0918769634	"	"	
Etialemahu W/kdian	Female	0918784559	"	"	
Ademe Hussien	Male	0936348822	"	Metema	Lemlem Terara
Babale Abegaz	Male	-	"	"	
Mohamed Yibedafer	Male	0934014673	"	"	
Ahmed Mustefa Said	Male	0918257887	"	"	
Yimer Ali	Male	0918184987	"	"	
Sheh hussien Adem	Male	0918174927	"	"	
Dawd Mohammed	Male	0932272914	"	"	
Mohammed Adem	Male	0934553633	"	"	
Gizachew Mohammed	Male	0939257857	"	"	
Mohammed Awel	Male	0918080121	"	"	
Getaye Hassen	Male	0918175349	"	"	
Bushra Abdela	Male	0918613046	"	"	
Addise Tegegn	Female	-	"	"	
Meryem Ibrahim	Female	-	"	"	
Zemzem Mohammed	Female	0936380620	"	"	
Merem Mohmmed	Female	-	"	"	
Zeineba Mohammed	Female	0918212274	"	"	
Fatima Ali	Female	-	"	"	
Momina Mabre	Female	-	"	"	
Dejyitnu Kase	Female	0918238755	"	"	
Mandefro Assefa	Male	0927690122	"	"	Das
Adachew Abegaz	Male	0927606941	"	"	
Ibrahim Mekonen	Male	0918175125	"	"	
Letaw Mellese	Male	0933465913	"	"	
Siras Amagnu	Male	-	"	"	
Mohammed Nur	Male	0918554820	"	"	
Yegnanesh Adis	Male	0918272809	"	"	
Tesfaye Mekuriaw	Male	0927628283	"	"	

SESA report for the implementation of REDD+ in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
Tekle Bayu	Male	0929999981	"	"	
Sefaw Assefa	Male	-	"	"	
Tekem Getahum	Male	-	"	"	
Abera Admasie	Male	0931499422	"	"	
Yosef Gubra	Male	-	"	"	
Abdu Ageze	Male	-	"	"	
Eyob Fentaw	Male	-	"	"	
Mohammed Kase	Male	-	"	"	
Mamo Assefa	Male	-	"	"	
Weresew Baye	Male	-	"	"	
Ahmed Mekonnen	Male	0918594902	"	"	
Mohammed Ahmed	Male	0918227484	"	"	
Hussien Kassaw	Male	0918476375	"	"	
Seid Abi	Male	0918045579	"	"	
Akale Melese	Male	0928490586	"	"	
Libase Sitotaw	Male	0918175354	"	"	
Mohammed Asege	Male	-	"	"	
Hassen Tegegn	Male	-	"	"	
Eshete Birke	Male	0936761540	"	Tarma Ber	Debre Maaza
Debaba Worku	Male	0932581494	"	"	
Habtu Kefelegn	Male	0915557590	"	"	
Nigussie Dessalegn	Male	-	"	"	
Sebesh Tademe	Male	-	"	"	
Belayneh Zerga	Male	0922101265	"	"	
Melake Kifle	Male	-	"	"	
Bizuneh Zewdie	Male	0926831169	"	"	
Bekele Moges	Male	0920747753	"	"	
Demeke Ayele	Male	-	"	"	
Mekete Worku	Male	-	"	"	
Asmaru Asegu	Female	0945568006	"	"	WofWasha
Sinkinesh Afework	Female	0921136289	"	"	
Ayelech Kebede	Female	-	"	"	
Emuye Gebre	Female	-	"	"	
Zenebech Bekele	Female	-	"	"	
Zenebu Mulu	Female	-	"	"	
Sasahu Tilahun	Female	-	"	"	
Lakech Betru	Female	-	"	"	
Abebu Gedlu	Female	-	"	"	
Fanaye Ayele	Female	-	"	"	
Yalemsew Eniyew	Female	-	"	Banaja	Woreda Office

SESA report for the implementation of REDD+ in Ethiopia

Name	Sex	Mobile Number	Region	Wereda	Kebele
				Shikudad/Kosos Ber	
Anteneh Asfaw	Male	0918537028	"	"	
Birhanu Bezabih	Male	0918742160	"	"	
Nigatu Bitew	Male	-	"	"	
Asires Mitiku	Male	-	"	"	
Anteneh Taye	Male	-	"	"	
Muluken Alamirew	Male	-	"	"	
Ajebush Ferede	Male	-	"	"	
Molla Yeneneh	Male	0937645513	"	"	
Yeshaneh Amsalu	Male	0920175497	"	"	
Gashaw Gessa	Male	0921580822	"	"	
Emebet Ayalew	Female	-	"	"	Senkela
Zertihun Moges	Female	-	"	"	
Asresah Melaku	Female	-	"	"	
Ayalenesh Getahun	Female	-	"	"	
Hizbadosh Nigussie	Female	-	"	"	
Ayalnesh Mekonnen	Female	-	"	"	
Alemtshehay Tilahun	Female	-	"	"	
Tadife Tamir	Female	-	"	"	
Mulunesh Yismaw	Female	-	"	"	
Yiftusira Yeshiwas		-	"	"	
Emiye Asmare		-	"	"	
Bitewush Admas		-	"	"	
Adanech Arega		-	"	"	Askuna
Farnus Bogale		-	"	"	
Tej Zegeye		-	"	"	
Bitewush Hailu		-	"	"	
Alayush Tsetargew		-	"	"	
Alemnesh Abaye		-	"	"	
Bitewush Eshetu		-	"	"	
Asayech Nigat		-	"	"	
Workneh Abegaz		-	"	"	
Tefera Abaye		-	"	"	
Tilahun Kasahun		0923232514	"	"	
Alganeh Asfaw		-	"	"	
Minayehu Kasahun		0927636429	"	"	

**Annex 7: Sample attendance Sheet from Amhara Region**




*Attendance Sheet at Woreda level*

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

Date 11/06/2015

Name of Woreda Tarmaber Kebele \_\_\_\_\_

Agenda: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Yashidanga Fekero	0919254032	<i>[Signature]</i>	ግጠና ላይ
2	Negash Demeksa	0913509927	<i>[Signature]</i>	ላይ ላይ
3	Abdisu Samara	0923652396	<i>[Signature]</i>	ግጠና ላይ
4	Rabia Hussien	0911777626	<i>[Signature]</i>	ላይ ላይ
5	Asnetir Amenasu	0913064525	<i>[Signature]</i>	ግጠና ላይ
6	Messim Girma	0913073280	<i>[Signature]</i>	ግጠና ላይ
7	Kebera Ayele	0921135333	<i>[Signature]</i>	ግጠና ላይ
8	AKALE WODWEN	0910911169	<i>[Signature]</i>	ግጠና ላይ
9	Yishak Tesfaye	0910800243	<i>[Signature]</i>	ግጠና ላይ
10	Yisak Tesfaye	0904160007	<i>[Signature]</i>	ግጠና ላይ
11	Solomon neta	554		ግጠና ላይ
12	Terefe Aga	0911830388	<i>[Signature]</i>	ግጠና ላይ



Grassroots MEMOs plc



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

Date 23/06/15

Name of Woreda Bunja Kebele Sankala

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

Lists of Participants

No	Name	Mobile	Signature	Remark
1	አሁን ተገባ		[Signature]	ሚሊ
2	አሁን ገብረ		[Signature]	አ/አ/ገ/ገ/ገ
3	አሁን ገብረ		[Signature]	አ/አ/ገ/ገ/ገ
4	አሁን ገብረ	0922513249	[Signature]	አ/አ/ገ/ገ/ገ
5	አሁን ገብረ	0934613983	[Signature]	አ/አ/ገ/ገ/ገ
6	አሁን ገብረ		[Signature]	አ/አ/ገ/ገ/ገ
7	አሁን ገብረ	0913961020	[Signature]	አ/አ/ገ/ገ/ገ
8	አሁን ገብረ	0913869877	[Signature]	አ/አ/ገ/ገ/ገ
9	አሁን ገብረ	0925182694	[Signature]	አ/አ/ገ/ገ/ገ
10	አሁን ገብረ	-	[Signature]	አ/አ/ገ/ገ/ገ
11	አሁን ገብረ	-	[Signature]	አ/አ/ገ/ገ/ገ
12				





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

Date 17/06/2015

Name of Woreda Metema Kebele Das

Agenda: \_\_\_\_\_

Lists of Participants

No	Name	Mobile	Signature	Remark
1	ገብረ ገብረ ገብረ	0927690122		የሰው ጤንና የጤን ጤን
2	ገብረ ገብረ ገብረ	092760 0326		ገብረ ገብረ ገብረ
3	ገብረ ገብረ ገብረ	0948775125		
4	ገብረ ገብረ ገብረ	0933465913	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
5	ገብረ ገብረ ገብረ	-	ገብረ ገብረ ገብረ	
6	ገብረ ገብረ ገብረ	0918554520	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
7	ገብረ ገብረ ገብረ	0918271809	ገብረ ገብረ ገብረ	
8	ገብረ ገብረ ገብረ	0927628283	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
9	ገብረ ገብረ ገብረ	0919999999	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
10	ገብረ ገብረ ገብረ	-	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
11	ገብረ ገብረ ገብረ	-	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ
12	ገብረ ገብረ ገብረ	0931499422	ገብረ ገብረ ገብረ	ገብረ ገብረ ገብረ



Organization MEMTO plc



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

Date 16/06/2015

Name of Woreda Metema Kebele Amuduru

Agenda: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Menness Abebe	0918060733		Environment
2	Tigist Yirga	0925300617		Environment protection
3	Getachew Tilahun	09-18-30-61-00		Environment
4	Getnet Kassa	0918175417		Agriculture
5	Yeziou Mengistu G.	0910088206		Women, children & Youth Affairs
6	Sisemaw Tsega	0912222227		Co-operative Promotion
7	Halatamu Adisu	0918 0435047		Environment
8	Kibre Kidusan Banti	0918210293		Water resource
9	Deju Zeyene	0918059966		Natural resource
10	Gebr Eamesh Gesta	0918333481		Women, children & Youth Affairs
11	Yirga Ferede	0912200111		W/Affairs
12	Tilahun Awoke	0918532661		Women, children & Youth Affairs



to   
to

**Annex 8: Sample Attendance sheet from Decha Woreda Women FGD, SNNP Region**



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

Date 13/10/2007

Name of Woreda Decha Kebele Gedam

Agenda: Focus group discussion at kebele level

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Wiro Aregoch Ago			PFM member
2	" Aregoch Blimiel			"
3	" Aregoch Asafa			"
4	" Wudito Wudero			"
5	" Abebel Kada			"
6	" Eggawha Bekela			"
7	" Alemto Ado			"
8	" Azalech Abebe			"
9	" Wudito Tafesse			"
10	" Asalefch Asafa			"
11	" Tariku Ha'le			"
12	" Azalech Tadeto			"

13 " Bekelech Blete

14 " Felekech Mekon



**Annex 9: Sample Attendance sheet for Dodola Woreda Men FGD, Oromia Region**



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

Date 3/10/07

Name of Woreda Dodola Kebele Deneba

Agenda: Kebele Level Focus Group Discussion

Lists of Participants

No	Name	Mobile	Signature	Remark
1	Anshaa Almikail	0920068231	<i>[Signature]</i>	
2	Gariibuu Herbbuu	0912975318	<i>[Signature]</i>	
3	Barsoo Dubee	0928039272	<i>[Signature]</i>	
4	Gamaaduu Weene	0926473066	<i>[Signature]</i>	
5	Ibrahim Gariso	0910284082	<i>[Signature]</i>	
6	Phubaa Geroo	0929324938	<i>[Signature]</i>	
7	Gabayo Simeu	0916018251	<i>[Signature]</i>	
8	Mibiruu Barsoo	0910440527	<i>[Signature]</i>	
9	Tyibbo Luqqee	0921358779	<i>[Signature]</i>	
10	Kubusi Fatao	0912757193	<i>[Signature]</i>	
11	Uuor Hucuu	0922701912	<i>[Signature]</i>	
12				



**Annex 10: Sample Attendance sheet from Decha Woreda Youth FGD, SNNP Region**



GreenMEMI plc



GECSP PLC

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

Date 13/10/2007

Name of Woreda Decha Kebele Awrada

Agenda: Focus group discussion at kebele level

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**Lists of Participants**

No	Name	Mobile	Signature	Remark
1	Ato Riffle G/Mon's	0917254664		D.A
2	" Alemayhu Haile	-		PFM member
3	" Ashetiv G/meniam	0948024848		PFM member
4	" Gebyhu Gebre	0935399523		PFM member
5	" Admasu Haile	-		PFM member
6	" Mido Zeleke	-		PFM member
7				
8				
9				
10				
11				
12				



**Annex 11: Sample Attendance sheet from Arba-Minch Zuria Woreda Consultation, SNNP Region**

GreenMEMIs plc 

Form I.4: Attendance Sheet for SESA-ESMF

Date 10-06-2015

Name of Woreda Arba Minch Zuria Woreda

Agenda: Consultation on REDD+ program with Woreda stakeholders

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Lists of Participants

No	Name	Sex	Institute	Mobile	Signature
1	Assefa Adeto	M	FIELD	0960859587	
2	Kassahun Degefa	M	Education	0923859857	
3	Tamiru Tesfaye	M	Trade Industry	0916222771	
4	Aisine Adamu	M	Administration	0913899745	
5	Tobe yemo	M	Administration	0990977998	
6	Dawit heniso	M	A/Z Youth	0913604492	
7	Sisay Wolde	M	A/Z W/ S/ C/ O/ F	0910653060	
8	Addisu Getu	M	Women Office	0910413322	
9	Abej Betiza	M	A/Z W/ Administration	0910726709	
10	Hareguwa Tesfaye	F	"	0961281661	
11	Muluken Gebena	M	A/Z W/ Tourism	0916064748	
12	Deqide Demisse	M	Administration	0910094177	
13	Daniel Keating	M	" "	0926386616	
14	Solomon Wankie	M	A/Z W/ Adminstr	0934238843	
15	Bekete Ancha	M	A/Z W/ C/ S/ O/ F	0939808286	
16	Maredurkw Tunato	F	A/Z W/ O/ S/ S	0913785359	
17	Tesfu Abire	M	A/Z W/ Police	0916301023	
18	Debalke Bocho	M	A/Z W/ W/ C/ O/ F	0923488552	
19	Mosey Mamon	M	A/Z W/ W/ C/ O/ F	0936498041	
20	Engida Gigege	M	" " " "	0910451940	



## Annex 12: 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.

**ProtectedArea:** 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.

**SustainableDevelopment:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**TraditionalKnowledge:** 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.