

FEDERAL DEMOCRATIC REBUBLIC OF ETHIOPIA MINISTRY OF ENVIRONMENT AND FOREST NATIONAL REDD+ SECRETARIAT



National REDD+ Secretariat Committed to making Ethiopia ready

to the global REDD+ mechanism

NATIONAL REDD+ STRATEGY

(FIRST DRAFT)

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1. BACKGROUND

REDD+ involves a new way of curbing land use based CO2 emissions. It is a mechanism which provides an economic incentive to encourage developing countries to reduce carbon emissions through putting in place sustainable forest management.

With more than 60 million hectares of forests including woodlands and shrub lands covering approximately 50% of its land area, Ethiopia has a huge potential and is among the countries partnered with FCPF to implement REDD+.

As Ethiopia's economy is largely dependent on weather sensitive agriculture and hence vulnerable to climate change impacts, it is in the interest of the country to participate in the efforts to curb global climate change through the implementation of REDD+ programs to significantly reduce emissions from land use including forestry by reducing the rate of deforestation and forest degradation. Moreover, the strategy aims to ensure biodiversity conservation, watershed protection, livelihoods improvements and contribute to the overall economic growth of Ethiopia.

REDD+ will be implemented within Ethiopia's Climate Resilience Green Economy (CRGE) Strategy framework that sets out that by 2025, Ethiopia will become a middle-income country, resilient to climate change impacts and with a zero net increase in greenhouse gas (GHG) emissions over 2010 levels. REDD+ contributes to the achievement of the CRGE targets through improved management of forests and agricultural areas.

REDD+ offers an opportunity to implement forestry abetment levers and ensures that efforts to mitigate land use induced climate change impacts are carried through harmonization of existing sectoral policies and strategies related to agriculture, energy and forest. It also takes into account

Ethiopia's aspirations to realize rapid and sustainable economic growth. With an estimated emissions reduction or carbon removals of 130 million tCO2e annually, 50% of GHG emissions between 2010 and 2030 will happen as a result of implementing REDD+ process.

The national REDD+ strategy of Ethiopia addresses key issues pertaining its effective implementation. The strategy identifies and thoroughly analyses key sectors that are directly or indirectly involved in emissiosn reduction, focusing on sectorial policies. Likewise, it identifies international and national policies and conventions related with REDD+ implementation and proposes appropriate REDD+ legal framework. As institutional arrangement is key to effective implementation of REDD+, the strategy also forwards workable institutional setup that guarantees effective inter-sectorial, regional and sub-regional coordination.

This strategy will be followed by a comprehensive action plan that elaborates the required activities to address the drivers of deforestation and forest degradation. The action plan will be incorporated into the Growth and Transformation Plan (GTP II) and implemented by the relevant sectors in line with existing sectoral policies and strategies.

As deforestation and forest degradation in Ethiopia is largely driven by activities including those in the other sectors mainly agriculture, energy, infrastructure, etc., the success of this strategy and achieving the desired goals of emission reductions including other co benefits is highly dependent on a coordinated planning and implementation among the key sectors.

2. STRATEGIC DIRECTIONS

2.1 The vision of Ethiopia's National REDD+ Strategy

To see that the successful implementation of REDD+ guarantee that the forest sector achieves a its mitigation potential (130Mt CO_2e) and significantly contributes to the overall national goal of attaining a middle income economy by 2025

2.2 Mission

• To ensure sustainable management of forests for both reduced carbon emissions, carbon stock enhancement and other co-benefits;

• To ensure effective legal and institutional setup for the implementation REDD+ programs, projects and activities

• To ensure REDD+ projects deliver socio-economic benefits and contribute to livelihood improvement;

• To enhance the capability of forest managers and support groups to successfully and equitably implement REDD+ strategies.

2.3 Objectives

The Strategy envisages guiding the coordination and implementation of REDD+ initiatives to ensure Ethiopia optimizes the benefits of carbon trading and other ecosystem services from sustainably managed forests.

Specifically, the Strategy intends:

• To outline the mechanism for effective cross-sectoral coordination in the implementation of strategic options to protect standing forests and enhancement of carbon stocks through A/R

• To ensure that forests significantly contribute to the national economy through enhanced forest ecosystem services

• To ensure that a robust baseline scenario and an effective MRV system is in place for determining forest carbon changes,

• To ensure that policy, legal and institutional issues related to forest governance are effectively addressed for a successful REDD+ implementation

• To establish and operationalize a fair and transparent REDD+ financial mechanism and incentive schemes,

• To identify mechanisms to effectively overcome the forces and incentives that drive deforestation and forest degradation

• To engage and enhance active participation of a wide range of stakeholders in REDD+ processes,

• To build capacity in terms of training, infrastructure, systems and equipment to support the REDD+ policy,

• To promote knowledge generation and strengthen public awareness, communication and information sharing systems on REDD+ issues and

• To ensure that Ethiopia's REDD+ implementation observes social and environmental safeguards.

2.4 REDD+ Principles

The Strategy envisages that implementation of REDD+ is based on a set of principles that ensures climate benefit along with co-benefits (biodiversity and livelihoods) while respecting the rights of local communities and forest dependent communities. Therefore, the four cardinal principles of Ethiopia's National REDD+ Strategy are:

Equity: REDD+ contributes to sustainable and equitable development by strengthening the livelihoods of forest-dependent communities

Effectiveness: REDD+ demonstrably contributes to the national greenhouse gas emission reduction goals while working towards a global objective

Transparency: REDD+ activities are transparently undertaken to ensure a clear and easy to understand implementation process for all stakeholders.

Accountability: REDD+ implementation is fully accountable to the people of Ethiopia and the international community in terms of relevance, process, funding, and results obtained.

Commitment: REDD+ implementation demonstrates Ethiopia's commitment to global climate change mitigation initiatives

Institutional arrangement, Forest Strengthening **Emission reductions** governance, financing mechanism, institutions and increased carbon safeguards, MRV stocks Land use planning, law enforcement, Legal and regulatory **Biodiversity** carbon tenure, incentives/disincentives **Frameworks** conservation Multi-sector coordination, community Stakeholder Watershed protection participation, private sector, capacity Engagement building, communication, benefit sharing Enhancing the role of SFM, BD conservation, A/R, restoration, **Strategic actions** SLM, Climate Smart Agr. (CSA), rural forests in the energy, national programmes research economy

2.5 Ethiopia's REDD+ Strategic Pillars

3. INTER-LINKAGES AND SYNERGY AMONG KEY SECTORS

Agriculture Development Led Industrialization (ADLI) is an overarching economic development policy in Ethiopia. It places agriculture at the hub of most economic development endeavors. The ADLI strategy is believed to improve and the performance of agriculture that will not only increase the income of rural households but also increases market surplus that eventually provide more agricultural products and raw materials to the industry and urban economy. This in turn will promote industrial production and will dynamically bond rural-urban economies. Initially, the ADLI strategy emphasized the potential of smallholder agriculture and crop production, with very limited attention to other sectors such as natural resource conservation and forest development. Consequently, there was a huge challenge to maximize the synergy between agriculture, environment and similar sectors. However, the focus on natural resources conservation and sustainable development has substantially improved during the successive planning periods (e.g. PASDEP and GTP). Particularly, the GTP document recognizes that sustainable development in Ethiopia can be achieved if development programs are pursued in the social, economic and environmental sectors in a balanced way. Improving the synergy between different economic sectors and building green economy is reinforced by the CRGE strategy. The CRGE strategy focuses on four pillars: Improving crop and livestock production practices for higher food security and farmer income while reducing emissions; Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks; Expanding electricity generation from renewable sources of energy for domestic and regional markets; transforming to modern and energy-efficient technologies in transport, industrial sectors, and buildings.

Agriculture and environmental sectors are strongly interlinked. Consequently, the way in which environmental issues are addressed in the coming years will have a significant impact on the country's economic development and well-being of the people. Despite the integration rhetoric of the various strategies, the current agricultural development practices resulted mainly in a spatial expansion of land under cultivation, most often at the expense of forest and wood lands. Thus, expansion of agricultural land is the main driver of deforestation. Studies have shown that the cultivated area in Ethiopia has increased from 9.44 million ha in 2001 to 15.4 million ha in 2009. Forest degradation has also resulted from unsustainable fuel-wood consumption that accounts for 46% of all forestry-related emissions. This is attributed to the current energy consumption patterns in Ethiopia, which heavily depend on traditional biomass fuels. The skewed dependency on biomass energy sources for cooking, heating and even lighting in turn resulted in major environmental impacts, including deforestation, land degradation, decline in agricultural productivity, and increased greenhouse gas emissions. A strategy that effectively addresses cross-sectoral problems should take into consideration the inter linkage and interdependency among the sectors.

4. LEGAL AND REGULATORY FRAMEWORKS

4.1 Legal framework

Reducing Emission from Degradation and Deforestation (REDD+) is a cross-sectoral undertaking the process of which is nested in forest as well as in a number of other, non-forest segments of the economy. As a result REDD+ functionality and effectiveness depends on the presence and efficient execution of prudently constructed, relevant and realizable policies and legal frameworks governing sectoral (forestry) and cross sectoral issues. Among others, land tenure, energy, land use policies, agriculture development programs are some of the most relevant legal frameworks beside the forest policy itself.

REDD+ Ethiopia has to deal with both the national and the global REDD+ agenda taking into consideration current policy and legal frameworks in light of what is required of REDD+ to achieve at national and global levels and indicate gaps in content and harmonization of sectoral laws. Efficient and effective implementation of REDD+ requires revision and customization of existing sectoral and non-sectoral policies, laws and regulations. Revisions of laws may be considered in areas of land use, property rights and permission issuance system for logging (agricultural investment).

Public, Private and Community participation

 \rightarrow To the advantage of REDD+ objectives, the country is now widely embracing PFM as the main management approach which can play a dual role: protect and use the forest in sustainable ways, introduce good forest governance that guards community rights and use local knowledge. The ideas of community forest and participatory forest managements need to enter the legal

book. The law shall provide communities with sufficient autonomy and protect them from bureaucratic entanglement and allows them to fully exercise their rights.

 \rightarrow Private investors, parastatals, public and religious institutions, youth and women organizations should be encouraged and supported to start their own forests. Enabling legal environment should be created such as: land grant, long-term interest-free loan, tax grace during the first two harvests, and technical and administrative support, etc.

Forest tenure: Rights over forest and carbon

 \rightarrow Land tenure and carbon rights are vital issues to achieve emission reductions, ensuring transparent benefit sharing and influencing non-compliance accountability in the context of REDD+ strategies. Therefore, REDD+ performance would be effective, if, and only if, the forest resources in the country are established on fair and stable forest property rights regimes. Such questions should be clearly answered, who owns, manages, and uses forests resources, and how is the rule governing rights and responsibilities enforced. Currently, for instance, private forest holdings are not certified as "forest property", but as farm lands. Claimants over forests and trees of Ethiopia include: the state, community, private individuals, and Churches. It is important that the forest law recognizes and certify such holdings and promulgate regulations that help to regulate their management and utilization.

Benefit sharing (Who has the right to carbon?)

The existing forest law falls short of addressing the issue of carbon rights and benefit distribution among stakeholders. In the Ethiopian context, millions of people are dependent on forests around them; they are de-facto custodian of forests, and without their participation, implementation of REDD+ objectives is unthinkable.

I. Understanding of "rights" in its legal sense has led to the argument that, as the forest is owned by the state, any benefit from it (forest) shall first go to its owner (the state), or the latter shall receive the lion share. The simplification of the term "rights" is not advisable. In the context of countries like Ethiopia the term "rights" needs to consider the social as well as the ethical meaning of the term, not only the legal connotation.

II. The forest law and the associated regulation need to put together clear direction by taking into account particularly the issue of direct benefits from carbon sequestration from forests owned by the state and also those forests under PFM. The forest regulation should set criterion by which carbon stakeholders can be identified, categorized and receive benefits. The law must also be clear and specific on the rights of private individuals to benefit from carbon gained from forests established by them.

4.2 Enforcement of environmental laws

Policy and law enforcement of forests and other related environmental regulations has remained difficult barrier for achieving the objectives of programs and projects in the sector. Thus the most formidable problem for REDD+ performance originates, not from policy/law deficiency, but from lack of effective enforcement. The difficulty arises from

- a) The nature of the forest resource itself (expansive, and not cost-effective to guard);
- b) Weakly constructed forest property rights, where the de-jure claim by the state, has been constantly challenged by de-facto community use;
- c) Lack of strong administrative and political support by local government;
- d) Possibly, from rent-seeking behavior by some local authorities.

Addressing these problems requires interventions such as awareness creation, capacity building to law enforcement bodies, increased public participation and putting in place a transparent system among others.

5. INSTITUTIONAL ARRANGEMENTS

Ethiopia will follow a partially decentralized approach for its REDD+ institutions and hence responsibilities are vertically divided between national, regional and woreda levels. Regional level actors can implement REDD+ functions at their jurisdictions with some degree of independence from the national level authority. A nested approach may be implemented with any combination of scales at regional, woreda or kebele levels. Guidelines will be formulated to govern design and implementation of nested actions.

The principles on which the institutional arrangement for REDD+ is based include: good governance, decentralization to appropriate levels, inclusiveness, cost effectiveness and accountability in all REDD+ implementation activities. Three entities have already been formed for REDD+ management arrangements at the federal level. **The Federal Level REDD Steering Committee (RSC)** is made up of high level representatives, regional governments and different relevant sectoral ministries. It is chaired by MoEF. Its main functions are an advisory and guiding role, and the linking of REDD issues and activities to senior government agencies.

The REDD Technical Working Group (RTWG) is made up of active practitioners in the REDD+ field, with representation from research, academia, government, NGOs and other development organizations. These technical experts are responsible for the day to day management of the REDD+ strategy development. The RTWG also plays a key role in ensuring good coordination between the activities related to REDD+ and the other sectors, as a selection of its members take part in the REDD+ Sub Technical Committee.

The Federal level REDD+ Secretariat with a national coordinator and key technical & administrative staff is established under the State Minister of Forest. The Secretariat is supported by the RTWG and provide overall technical guidance to the REDD+ Readiness process. The Secretariat is responsible for the design and implementation of all elements of an effective national REDD+ system.

At Regional level, only REDD+ focal persons have been identified so far in most of the regions to act as coordinators of the REDD+ readiness processes. Similar arrangements as the federal level will be developed to ensure an effective and devolved REDD+ implementation system that is consistent with the national level organization. These regional level bodies are: **Regional REDD Steering Committees (RRSC), Regional REDD Technical Working Groups (RRTWG) and Regional REDD+ Coordination Unit (RRCU)**. These will ensure more representation within each region, with an emphasis on multi-stakeholder representation (including community representation). Appropriate REDD+ management structures for woreda and kebele levels will be developed/ modified by regions as necessary.

Regarding technical linkages and communication, the REDD+ Secretariat, under the leadership of the State Minister, will have strong linkages with the Steering Committee and also provide guidance to the RCU. The RCU in turn shall have strong working relations with the REDD+ secretariat and also guides and supports the woreda level implementation Unit. The woreda level implementation Unit regularly communicates with the RCU and also ensures the implementation of the REDD+ actions on the ground through technical support to the kebele level implementation.

The validation and verification processes related to GHG calculations carried out at various levels from local sites to regional and national levels will be facilitated by the REDD+ Secretariat. In the long run and in consultation with stakeholders, an accredited separate body that will take up this task will be instituted in country. This independent third party will function in line with UNFCCC's modalities.

There is a strong need to strengthen the working relationships among implementing parties, including through strengthened federal, regional and local level government institutions and NGOs. Coordination on land use related implementation policies among different government institutions both at national and regional levels is needed to ensure consistency in REDD+ policies and measures. The REDD+ Secretariat ensures the effectiveness of thematic

coordination among various ministries/institutions and between national, regional and local governments.

REDD+ Functions	Federal (National) Level	Regional (Sub-national) Level
Provide overall management and oversight of the process	 » Elaborate national REDD+ strategies and policies; - FRSC » Oversee the implementation and review of REDD+ strategy and policies; - REDD+ Sec. » Review and approve REDD+ plans and programs of Regions - MEF » Engage in REDD+ international relationships and partnershipsMEF » Coordinates regional demonstration activities - REDD+ Sec. 	 » Elaborates REDD+ plans, programs and projects; - RCU » Oversees implementation and MRV of REDD+ plans, programs and projects; - RCU » Reports to the National REDD+ Secretariat; - RCU » Coordinates the implementation of strategies at Wereda & Kebele levels - RCU
Manage REDD+ finance	 » Collect funding for REDD+ from international and national sources; - MoFED » Manage funding for REDD+ from international and national sources; - MEF » Allocate and disburse resources according to REDD+ national strategy and policies; - MEF » Ensure compliance with nationally and internationally agreed-upon financial, fiduciary and reporting procedures; REDD Sec. » Manage relationships with REDD+ carbon market MEF 	 Manage finance allocated for the regional REDD+ Implementation; - RCU Disburses resources to approved REDD+ plans, programs and projects; - RCU Ensures compliance with nationally and internationally agreed-upon financial, fiduciary and reporting procedures-RCU
Provide technical guidance and support for REDD+	 » Put in place national standards for REDD+ (e.g. MRV and for social and environmental safeguards) - REDD Sec. » Guides and monitors regular forest assessments and MRV activities - REDD+ Sec. » Review and approve forest assessment and MRV results; - MEF » Manage relationships with international REDD+ technical bodies; REDD Sec. » Provide technical assistance to REDD+ parties REDD Sec. 	 » Applies national standards for REDD+ metrics, MRV, and social and environmental safeguards;- RRTWG/RCU » Performs regular forest assessments and MRV activities and forwards outcomes to national authorities; - Regional implementing Bureau/RCU » Provides technical assistance to programs and projects. RCU

Table 1. REDD+ Institutional arrangement (Agencies, Functions and levels of implementation)

Implement REDD+ activities	 » Implements national enabling & readiness activities and coordinates demonstration activities; - REDD Sec. » Supervise and coach REDD+ implementation - REDD+ Sec. 	 » Prepares and implements REDD+ projects in accordance with REDD+ national strategies and policies, MRV standards, and social and environmental safeguards;- RCU/Regional Implementing Bureaus/wereda offices » Submits results to national REDD+ oversight and certification agency RCU/
Track, register and certify REDD+ actions and/or outcomes	 » Put in place and oversee the national REDD+ MRV and Certification standards & procedures ;- REDD+ Sec. » Registers & Certify MRV REDD+ results; - Third party (Tbi) » Facilitate REDD+ payments and distribution of Certified Emission Reductions among REDD+ project participants; - MEF » Manage relationships with international registry and certification bodies REDD+ Sec./MEF 	 » Ensures that sub-national programs and projects comply with national REDD+ MRV and certification standards and procedures;-RCU/RRTWG/Wereda Regional EPB » Submits results to national authorities for approval, registry and certification RCU
Ensure REDD+ safeguarding and accountability	 » Put in place and oversee the operation of participatory and consultation mechanisms and of social and environmental safeguards; - REDD Sec/RTWG » Put in place and oversee operation of grievance and redress mechanism; - REDD+ Sec./MEF » Manage relationships with international safeguards and accountability bodies; - REDD+ Sec./MEF » Put in place a safeguard information system (SIS) - REDD+ Sec/SESA TF 	 » Ensures that sub-national programs and projects comply with national participatory and consultation procedures and national social and environmental safeguards; - RCU/RRTWG » Ensure the implementation of grievance and redress mechanism or refer parties to the national level as required - RCU.
Capacity building	 » Provide or facilitate capacity building to national & regional REDD+ staff; - REDD+ Sec » Provide or facilitate capacity building for all major national level REDD+ stakeholders - REDD+ Sec 	 » Provides/organizes training and capacity building to technical staff of REDD+ stakeholders, (in collaboration with REDD+ secretariat as needed); - RCU » Provides capacity building and facilitation to ensure proper participation of local communities - RCU

Figure 1 REDD+ Institutional Structure



6. SOCIAL AND ENVIRONMENTAL SAFEGUARDS

Ethiopia is committed to developing and enforcing REDD+ social and environmental safeguards during implementation of this strategy. Safeguards can be broadly understood as policies and measures in order to mitigate both direct and indirect impacts on communities and ecosystems. A REDD+ safeguard system in the context of this Strategy is meant to include a review of REDD+ activities against environmental, social and governance screening criteria; a re-design of activities to address risks and maximize benefits; monitoring of and reporting on overall compliance against a list of agreed standards; and verification of the results.

The development of SESA will be informed by an analysis of Ethiopia's existing safeguard policies and regulations along with relevant World Bank safeguards policies in a manner that confirms the execution of REDD+ activities are in accordance with UNFCCC guidelines.

MEF will be the lead institution to ensure implementation of safeguard instruments related to REDD+ at all administrative levels.

The SESA will provide an Environmental and Social Management Framework (ESMF) that will outline the procedures to be followed for managing potential environmental and social impacts of specific policies, actions and projects during the implementation of the REDD+ strategy

The development of SESA/ESMF will ensure multi-stakeholder consultation and participation in compliant to World Bank safeguard policies and the Cancun Accord with special consideration to livelihoods, rights, cultural heritage, gender, underserved groups, capacity building and biodiversity.

A grievance and redress mechanism will be developed. Implementation of the mechanism will ensure that all persons are presented with procedures that value the opportunity to be heard; promote conflict resolution; encourage the development of harmonious partnerships; ensure that conflicts and grievances are mediated fairly; and are transparent and equitable.

Grievance mechanism will be associated with the State's governance system, like kebele, woreda, zonal, regional and national courts and dispute resolution mechanisms, and ombudsman offices.

Safeguard Information Systems (SIS) to provide, a systematic approach for collecting and providing information on how REDD+ safeguards are being addressed and respected throughout REDD+ implementation. SIS will be combined with national REDD+ data base system in order to collect and share information on safeguard issues.

7. FRL/FREL/M & MRV

FREL/FRLs are benchmarks for assessing each country's performance in implementing REDD+ activities (FREL includes only emissions from deforestation and degradation and FRL includes both emission by sources and removals by sinks) and M&MRV refers to the functions that the required National Forest Monitoring System must fulfill for forest monitoring and for estimation and international reporting of forest emission and removals.

The main reason for developing FREL/FRL is to access international finance linked to positive results from implementing REDD+ actions, and their requirements (guidance for submissions and technical assessment), included also the M&MRV system's specifications, depend on the specific program focus on finance for results-based REDD+ actions. Waiting for an UNFCCC initiative in this regard and in addition to bilateral Agreements, there are four specific programmes: the Forest Carbon Partnership Facility (FCPF) Carbon Fund (the only program that has explicit guidance in its Methodological Framework for the development of Reference Levels), Germany's REDD Early Movers program (REM), Biocarbon Fund's Initiative for Sustainable Forest Landscapes (ISFL) and the Verified Carbon Standard's Jurisdictional and Nested REDD+ (VCS-JNR).

Using the requirements from FCPF Carbon Fund, the MRV component will monitor as targeted activities; deforestation, forest degradation (if emissions are greater than 10% of total) and pilot techniques will be tested to monitor carbon stock enhancement.

The establishment of FREL/FRL will involve a nested approach, using both sub-national and national baseline data. It will established at least two alternative baseline scenarios; a historical annual average over a 10 year period and a historical trend based on changes over 10 years. The number of points to calculate the historical annual average and the historical trend model have not yet been decided (at least three). The end date for the historical analysis is the most recent date prior to 2013 for which forest cover data is available. At the moment the national LULC map is being completed using Landsat mosaics from 2013 and 2010.

A proposal for statistical sampling analysis will be preferred to a 'wall to wall' analysis to calculate the activity data (it should be determined at least twice in the five year crediting period, but actually It will be used a spatially explicit tracking of land-use conversions over time). The uncertainties related to activity data will be quantified.

To calculate the emission factors corresponding to changes in LULC all significant pools (representing more than 10% of total) will be measured. IPCC Tier 2 will be used to establish it (country specific data for key factors), but in the future the national inventory of key C stocks (IPCC Tier 3), considering repeated measurements of key stocks through time and modeling,

will be used improving the accuracy. The uncertainties related to emission factors will also quantified (based on this level of uncertainty - AD and EF - a prescribed amount of emission reductions will be placed in a buffer reserve).

In all cases there will be consistency with UNFCCC submissions of national GHG inventory and with the IPCC's methodological guidance.

The National Forest Monitoring System will have two basic pillars according the considered functions (monitoring function to allow assess a broad range of forest information and MRV function for REDD+ refers to the estimation and international reporting of forest emission and removals, see Figure 2).

The MRV system will be, as required, a robust and transparent national forest monitoring system for the monitoring and reporting REDD+ activities, providing estimates that must be transparent, consistent and accurate (taking into account national capabilities and capacities). It will use a combination of remote sensing and ground-based forest carbon inventory – National Forest Inventory - approaches for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes.

The MRV system will be designed to be able to accommodate multiple stakeholders. At the national level, a coordination mechanism will be put in place to provide a link between policy and practice at different scales. Additionally MRV-related activities and arrangements will be linked to existing relevant structures, including higher education and research institutions and ongoing monitoring activities at the local level. The implementation of MRV will be coordinated by the REDD+ Secretariat, with support from the REDD Technical Working Group and a number of potential national (MRV Task Force Members) and international partners (FAO, WB).

As the REDD+ scheme in Ethiopia is expected to deliver emission reductions another cobenefits, 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.



Figure 2 - Approaches and Tools to fulfill the functions of the National Forest Monitoring Systems (Source: Ethiopia's MRV Roadmap, 2013)

8. STAKEHOLDER PARTICIPATION AND COORDINATION

A comprehensive stakeholder mapping and stakeholder analysis will be conducted in order to prioritize beneficiaries and relevant stakeholders based on their relevance to the program as well as responsibility. The consultation process will take into consideration national, regional, wereda and kebele administrative structure. The national SESA task force will be responsible for handling C & P process for stakeholders at federal level, while the C & P process at sub-national (regional, wereda and kebele) level will be the responsibility of the respective REDD+ management units. The overall process will be coordinated by the national REDD+ secretariat.

Issues for consultation and communication need to be carefully selected according to the level at which the C & P process is taking place to make it relevant to the stakeholders concerned. The issues identified for consultation should be delivered effectively and timely at each administrative level and to the respective stakeholders using appropriate method and using accessible languages and style. Depending on the level at which consultation will be made and the educational status of the stakeholders a range of participatory methods and tools will be employed. A communication strategy to guide the process stakeholder consultation and participation will be designed.

While ensuring multi-stakeholder representation, the process should take into account the achievement of high level of participation with particular emphasis to gender and underserved groups of the communities. Moreover, the consultation and participation process will be continuously monitored and evaluated.

A mechanism for coordination and cooperation among relevant stakeholders will be established at different levels. These includes specifying and overseeing roles, responsibilities and monitoring activities.

A stakeholder database with a user-friendly information system will be designed to store all data from consultations in an accessible manner. The database system should allow the rapid and efficient recording and classification of comments so that they can be processed and transformed into usable information.

9. STRATEGIC OPTIONS TO ADDRESS DRIVERS OF DEFORESTATION AND FOREST DEGRADATION

9.1 Direct and underlying drivers of deforestation and forest degradation

Expansion of agricultural activities (small-holder farming and large scale commercial agriculture) and incidence of forest fires are major causes of deforestation in Ethiopia though their importance may vary in different regions and types of forests. Small scale agriculture is more important in the high forest areas whereas commercial agriculture is more important in the woodlands. To a lesser extent, infrastructure development (particularly road network) can directly lead to forest clearance as it opens up and facilitates access to agents which may impact the remaining forest. Major causes of forest degradation is fuel wood extraction. Equally important causes but with lesser impact include livestock grazing, forest fire and illegal logging. Although site specific, coffee and chat growing practices also lead to forest degradation. Illegal settlement (Squatters),

These drivers are manifestation of several underlying factors principally legal and regulatory (unclear forest tenure and property right regimes, carbon tenure, benefit sharing, law enforcement etc...), institutional (inadequate resources, lack of coordination), demographic (population increase including internal migration) and economic (poverty, markets etc...) issues.

9.2 Strategic options

9.2.1 Policy and Institutional aspects

• Enhance cross-sectorial synergies and stakeholder participation

Revisiting existing policies and strategies of key sectors (agriculture, investment, Energy and other relevant sectors) so as to ensure increased synergy and minimize sectorial divergence in achieving the desired goal. Institutional arrangements that will ensure inter-regional coordination

will be put in place. Moreover, effective participation channels will be created to ensure active participation of stakeholders such as the private sector, parastatals, civil society organizations, community groups etc. Emphasis should be given to joint planning among core sectors (agriculture, energy and forestry) through a coordination platform on which decision makers of sectors can work together at federal level and implementing bureaus at lower levels.

• Forest governance and law enforcement

Improving the country's weak forest governance and law enforcement capacity at all levels is vital to attain greater effectiveness. To that end, preparation of coherent law enforcement guidelines, adequate financing for forestry institution, strengthening of regional and local level governance structures and development of skilled manpower will be carried out. Effective mechanisms will be maintained to ensure consistency in regulatory and implementation roles of ministries that are directly involved in REDD+. Consistent and tailored capacity building trainings will be provided to legal practitioners working at all levels.

• Forest tenure and property right

Establishing stable and equitable forest property right structures will be important. Legal and institutional reforms that warranty the forest ownership and use rights of local communities, private owners, religious and indigenous institutions will be practiced. The clarification and legal definition of forest tenure and property rights should be supplemented by regularization of duties and responsibilities of the entitled bodies with proper technical empowerment on REDD+ activities. Formulation of fair carbon rights for stakeholders including communities and government administrations at various levels of the REDD+ process implementation structure will be ensured. Ensuring equity in REDD+ actions through designing a comprehensive REDD+ benefit sharing mechanism will be aligned with the forest property right regimes. Tenure and property right arrangement will be built on lessons from best practices such as PFM.

• Land use planning

At national level a land use planning framework guideline that define relevant parameters and set criteria will be developed. Based on the framework guideline, broader regional land use plan will be formulated. Lessons from local level land use planning initiatives will be integrated into the process. The land use plan should consider existing policies and priorities within the key sectors (energy, forestry, investment and agriculture).

9.2.2 Targeted Measures

Core

• Ensure Sustainable Forest Management:

Various measures will be put in place to ensure sustainable forest management in a manner that will provide economic, ecological and social co-benefits. Participatory Forest Management (PFM) will be implemented in forest areas including woodlands, protected areas and reserve forests both for production and conservation functions. In coffee growing areas selected forest friendly coffee farming techniques aiming at optimizing outputs without compromising the biodiversity of the forest will be applied. A prevention based forest fire protection system will be put in place with the participation of relevant stakeholders and communities.

• Enhancement of forest carbon stock

Forests established on degraded lands through indigenous and exotic tree plantations as well as assisted natural regeneration will create additional forest carbon stock. Establishing new forests for carbon stock will be carried out by planting seedlings, protecting degraded sites to foster natural regeneration (area exclosure) and through enrichment planting in degraded forests. Afforestation activities will be planned and implemented by individuals, communities and the government on degraded sites identified as forest lands. Re-afforestation of degraded forests will also be carried out to create additional carbon within the existing degraded forests. Physical and biological conservation measures will be integrated with afforestation and reforestation activities to improve survival and productivity of established forests. New forest development and forest carbon stock enhancement activities shall be integrated with existing watershed management initiatives. Moreover, agroforestry activities will primarily be promoted in farmlands and degraded agricultural landscapes.

• Agricultural intensification

Agricultural intensification will aim at enhancing agricultural productivity per unit area to reduce the pressure on existing forests due to expansion of agricultural lands. This will be achieved through the use 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). To reduce the expansion of agricultural lands to forest areas, additional intervention will be the conversion of un-cultivated non-forest areas into agricultural lands through the use of small, medium, and large-scale irrigation schemes.

• Reduce demand for fuel wood and charcoal:

In order to reduce the demand for fuel wood and charcoal leading to forest degradation, dissemination and usage of fuel efficient stoves will be carried out focusing on urban centers and forest adjacent villages as outlined in the Biomass Strategy and Action Plan developed by the Ministry of Water, Irrigation and Energy. This Feasible alternative energy sources such as electricity, LPG, biogas, bio-fuel etc. will also be identified and used for household level cooking and baking. Moreover, adapted energy saving techniques will be introduced to institutions that consume huge quantities of fuel wood for cooking (such as prison centers, army barracks, Hospitals and Universities).

• Increase wood and charcoal supply

Supply of wood products will be improved through various commercial tree planting initiatives. Supply of timber, construction wood and fuel wood will be increased through plantations established and managed by regional forest enterprises, community forests and privately owned commercial forests. Fast growing timber and short rotation fuel wood species will be promoted for commercial plantations. As small scale intervention, agroforestry woodlots will be promoted around homesteads and on-farm tree planting will be encouraged to create sustainable source of fuel wood. Likewise, sustainable charcoal production schemes will be formulated and implemented. Charcoal production will be made both on sustainably managed natural forests and plantations established for this specific purpose. Modern charcoal production technologies will be promoted as part of forest based income generation to community groups while the supply gap to the local market will be addressed. Charcoal will serve as an export item by promoting active engagement of the private sector in charcoal production enterprises.

• Improved livestock management

To increase the productivity and resource efficiency of the livestock sector, the following strategic interventions will be implemented. Animal value-chain efficiency should be increased by improving cattle productivity (i.e., output per head of cattle via higher production per animal and an increased off-take rate) led by better health and marketing. Another strategic option is substitution of meat protein consumption with protein from poultry to significantly reduce emissions from domestic animals. In the same line, about 50% of animal draft power will be gradually substituted through the introduction of mechanical equipment for ploughing/tillage.

• Promote supplementary income generation:

PFM implementation will be made to include carefully selected livelihood strategies (income generating activities) to enable forest adjacent communities obtain direct economic benefit. The income generating strategies may include activities related to forests either directly through the promotion of small and medium scale enterprises based on wood products, NTFP harvesting, PES mechanisms, etc. Moreover, depending on local situations and potentials, other small scale businesses with minimal impact on forests such as mushroom, poultry, silk production, etc. including product value chains will be identified and used.

Cross-cutting interventions

• Capacity building

The effective implementation of the identified policy, institutional and physical measures requires capacity building initiatives to all actors actively engaged in REDD+ process. The capacity building programs will involve activities such as provision of material support, technical trainings, as well as local and international experience sharing. The multi sectorial nature of the suggested measures demands inter-sectorial need assessment and coordinated capacity building planning and implementation. The various actors at the different levels of the REDD+ process implementation units across institutional levels ranging from the Federal REDD+ Secretariat down to Wereda level implementing units.

Inter-sectoral coordination on planning and implementation

The successful implementation of REDD+ at national and regional level presupposes strong coordination among relevant stakeholders across all levels of organization which will obviously be a challenge. Although experience tells us that lack of coordination is a major challenge, the CRGE strategy direction provides an opportunity for a concerted effort among sectors (particularly energy, agriculture and forestry) to achieve a carbon neutral green economy at national level. This challenge will be addressed through ensuring an effective coordination among the core sectors (energy, agriculture and forestry) in the planning and implementation stage. None the less, 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, Ministry of Environment and Forest and Ministry of Water, Irrigation and Energy, is crucial for the realization of REDD+ in the country.

• Demand-driven Research and research and extension linkage

There is generally lack of comprehensive research for climate change adaptation and mitigation activities in Ethiopia. Equally challenging is the inadequacy of focused and demand-driven research in support of REDD+ implementation. Research theme identification will be a starting point before embarking on focused research in support of REDD+ implementation. Research on demand-driven REDD+ issues particularly biophysical and social aspects that will enhance REDD+ implementation should be dealt with. Some of the research themes among others in this regard include developing accurate local biomass equations, alternative measures to monitor forest degradation, participatory monitoring, exploring technical options to improve ecological soundness of restoration initiatives, renewable energy technology adoption and landscape management approaches. Assessing the feasibility of different mitigation levers, and social and policy issues related to land use and forest governance, evaluation of models for private public partnership, valuation of forests and their contribution to national GDP etc...The strategic aim of this undertaking will be two-fold: building in-country research capacity and ensuring linkage between research and extension.

• Ensure full participation and equitable benefit flow of women

A road map will be developed to guide gender main streaming which will be followed by an action plan that ensures the full participation and equitable benefit sharing for women in REDD+ process. Moreover, mechanisms will be developed to make sure that women-specific knowledge on natural resource management harnessed.

10. BENEFIT SHARING

The implementation of REDD+ programs should deliver real and meaningful benefits that are economically sustainable, and shifting towards low-carbon practices in the country. In order to achieve the objective of REDD+, a multiple of benefits including monitory and non-monitory incentives will be tailored to meet the needs of different stakeholders and thereby addressing drivers at multiple levels.

Priorities to guide the form benefits will take, how they will be accessed and when they will be available in order to ensure that incentives are meaningful and accessible for beneficiaries will be defined. Equitable distribution of the costs and benefits so that certain stakeholders do not bear unbalanced amount of the responsibilities nor receive unbalanced amount of the benefits.

A benefit sharing mechanism that will be developed for proper implementation of REDD+ will take into consideration the following elements:

- Eligibility criteria to participate in REDD+ actions will be developed in consultation with stakeholders. Experiences from PFM initiatives will be taken up.
- A range of benefits may include financial or non-financial and can be delivered as upfront programmatic investments or as ex-post payments for performance. Indirect benefits such as legal rights (e.g. use, access) to resources will also be considered. The mechanism should also consider augmenting financial benefits with technical assistance. In addition, the scheme should create options for the future through enabling communities to benefit from other forest based initiatives.
- The development of a benefit sharing mechanism will consider managing community expectations

- Criteria for being paid should be based on performance of each CBO. The timing of payments should be suited to local conditions and needs.
- Setting up of a separate window for REDD+ financial management (upfront as well as incentive money) and establishment of transparent and efficient system for disbursement of finance based on agreed share. At the grassroots level, financial benefits will be channelled to CBOs (not individuals).
- CBOs will develop bylaws pertaining to internal procedures for sharing of financial revenue between individuals members of CBOs considering specific aspects.
- Benefit distribution (the proportion of who gets what) will be revised as necessary taking into account new developments.

11. SUSTAINABLE FINANCING OPTIONS

Achieving zero net emissions from deforestation and forest degradation and furthermore, capturing emissions from other sectors through sustainable forest and land management can only be possible with a significant and immediate scaling up of investment. Ethiopia should design mechanisms to effectively access existing sources multilateral, bilateral and domestic financing for REDD+ financing. While international financing is very essential, it is equally important to explore in-country funding for REDD+ including from public and private sources. The general direction in REDD+ financing considers the following aspects.

- Exploring options for the establishment of domestic financing mechanism such as from public sources, public-private partnerships, etc. aiming at funding a greater share of projects with in-country capacity.
- Active involvement in international climate negotiations to shape as well as access international, bilateral and market based finance.
- Discussions with development partners for putting in place sustainable finance by way of a combination of performance based upfront funding as well as ER based ex-post payments.
- Ensure the engagement of the private sector (public-private partnerships) through the formulation of necessary incentive mechanisms.
- Explore other Payment for Environmental Services (PES) opportunities such as water, bio-prospecting, etc. in addition to carbon finance initiatives.

12. RISKS AND MITIGATION MEASURES

Risks	Mitigation
External	
Uncertainties in availability of external climate	* Diversification of REDD+ funding mechanisms.
fund from international commitment	* Exploring options for the establishment of
	domestic financing mechanism such as from public
	sources, public-private partnerships, etc. aiming at
	funding a greater share of projects with in-country
	capacity.
	• Explore other Payment for Environmental Services
	(PES) opportunities such as water, bio-prospecting,
	etc. in addition to carbon finance initiatives.
Delay of international level agreements on	•Active participation in international negotiations by
REDD+ systems	all Parties
	Promote common position among developing
	countries
Design and implementation of REDD+	• Promote country-driven design and implementation
processes influenced by external entities	of REDD+ processes.
	*Establish close cooperation with key partners and
	ensure pro-active engagement
Internal	
Insufficient inter-sectoral coordination in	Ensure inter-sectoral coordination through the CRGE
planning and implementation of REDD+	inter-ministerial committee and creating additional
	platforms across organization levels for coordinated
	planning and implementation.
REDD+ revenues may not be sufficient to	Promote other types of investments to address
address drivers of D&D	direct drivers of D&D