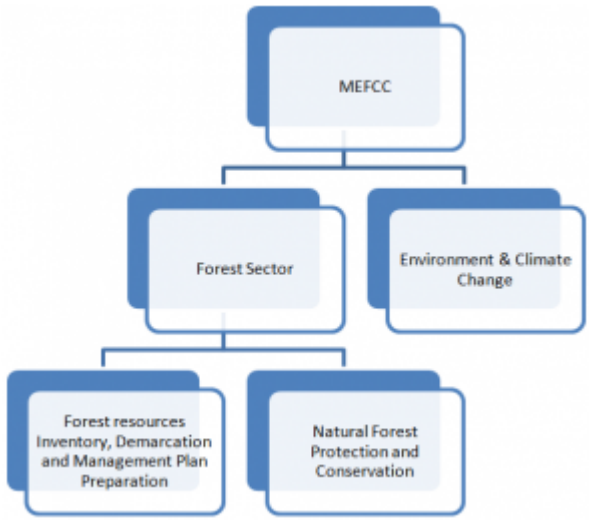
# About Forest Sector

# About Forest Sector of Ethiopia

The Forest sector was under Ministry of Agriculture before the Ministry of Environment and Forest was established by the amended proclamation 803/2013. The proclamation mandated the Ministry, inter alias, to Coordinate and ensure the forestry objectives and the basic forestry principles indicated in the forestry policy of Ethiopia.

## Forest sector institutional setup




Ethiopia has a vision to achieve middle-income status by 2025 in a climate-resilient green economy. The ambition is to build a green economy. The development of a green economy will be based on four pillars.

- • Agriculture: Improving crop and livestock production practices for higher food security and farmer income while reducing emissions
- • Forestry: Protecting and re-establishing forests for

their economic and ecosystem services, including as carbon stocks

- • Power: Expanding electricity generation form renewable energy for domestic and regional markets
- • Transport, industrial sectors and buildings: Leapfrogging to modern and energy efficient technologies

Major sources of emissions within forestry:

In forestry, the impact of human activities is a large source of CO2 emissions amounting to almost 55 Mt CO2e in 2010. Forestry emissions are driven by deforestation for agricultural land (50% of all forestry-related emissions) and forest degradation due to fuelwood consumption (46%) as well as formal and informal logging (4%). For more …

Main drivers for this projected development are:

- • – Deforestation leads to CO2 emissions, and is mostly caused by the conversion of forested areas to agricultural land. Emissions are projected to grow from 25 Mt CO2e in 2010 to almost 45 Mt in 2030.
- • – Forest degradation leads to CO2 emissions, and is primarily caused by fuelwood
  consumption and logging in excess of the natural yield of the forests, with the major driver being population growth. Emissions are projected to grow from around 25 Mt CO2e in 2010 to almost 45 Mt in 2030. For more …

Forestry: Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks Deforestation and forest degradation must be reversed to support the continued provision of economic and ecosystem services and growth in GDP. Fuelwood accounts for more than 80% of households' energy supply today – particularly in rural areas.

Furthermore, forests contribute an estimated 4% to GDP through the production of honey, forest coffee, and timber. They also

provide significant and precious eco-system services: they protect soil and water resources by controlling the discharge of water to streams and rivers, preserve biodiversity, function as a carbon sink, clean the air to create important health benefits, and boost land fertility.

Despite their economic and environmental value, Ethiopian forests are under threat. The growing population requires more fuelwood and more agricultural production, in turn creating needs for new farmland – both of which accelerate deforestation and forest degradation. Projections indicate that unless action is taken to change the traditional development path, an area of 9 million ha might be deforested between 2010 and 2030. Over the same period, annual fuelwood consumption will rise by 65% – leading to forest degradation of more than 22 million tonnes of woody biomass.

Besides the agricultural initiatives to reduce the pressure on forests (see above), the CRGE initiative has prioritized two strategies that could help to develop sustainable forestry and reduce fuelwood demand:

- • Reduce demand for fuelwood via the dissemination and usage of fuel-efficient stoves and/or alternative-fuel cooking and baking techniques (such as electric, LPG, or biogas stoves) leading to reduced forest degradation,
- • Increase afforestation, reforestation, and forest management to increase carbon sequestration in forests and woodlands. These initiatives would result in an increased storage of carbon in Ethiopia’s forests, provide a basis for sustainable forestry, and even allow the forestry sector to yield negative emissions, i.e., store more carbon in growing forests than are emitted from deforestation and forest degradation.
- • Promoting area closure via rehabilitation of degraded pastureland and farmland, leading to enhanced soil fertility and thereby ensuring additional carbon sequestration (above and below ground).

Forestry GHG abatement potential

Forestry – should receive particular attention: It contribute around 25% respectively to projected GHG emission levels under business-as-usual assumptions 50% of the total abatement potential.

| Sector | Abatement levers | Core assumptions (2030) | Gross abatement potential, Mt CO2e |
|---|---|---|---|
| Forestry | Fuelwood-efficient stoves | Household reach2 (million): 15.7/0.3 | **34.3** |
| | LPG stoves | Household reach2 (million): 0/0.3 | **0.6** |
| | Biogas stoves | Household reach2 (million): 1.0/0.1 | **2.3** |
| | Electric stoves and mitads | Household reach2 (million): 1.0/up to 4.9 | **14.0** |
| | Afforestation/Reforestation | Area in million ha: 2 (A) and 1 (R) | **32.3** |
| | Forest Management (forest/woodland) | Area in million ha: 2 (F) and 2 (W) | **9.7** |

Forestry in 5 million ha of forest and 2 million ha of woodland alone represents around 50% of the total domestic abatement potential (or 130 Mt CO2e) and, as a sector, can even yield ‘negative emissions’ via sequestration, i.e., storage of carbon in the form of wood, at a level that surpasses emissions from deforestation and forest degradation. The single most important lever is to reduce demand for fuelwood through fuelwood efficient stoves, offering a potential of almost 35 Mt CO2e reduction, while other advanced cooking and baking technologies (electric, biogas, and LPG stoves) offer an additional combined potential of more than 15 Mt CO2e. Capturing this abatement potential requires the switch of more than 20 million households to more efficient stoves. In addition, afforestation (2 million ha), reforestation (1 million ha), and forest management (2 million ha of forests and 2 million ha of woodlands) can help to increase sequestration by more than 40 Mt CO2e and hence even surpass any remaining emissions from the forestry sector. Pressure from agriculture on forests can be reduced by

agriculture intensification on existing land or unlocking degraded land thanks to irrigation, with the potential to lower deforestation and thus the associated emissions by nearly 40 Mt CO2e in 2030.

Different Projects executing on the Forest Sector

- – Rehabilitation opportunity Mapping with WRI
- – The UN-REDD Program
- – Institutional Strengthening for the Forest Sector Program
- – Biodiversity Conservation Program- GIZ and kfW
- – Restoration with WRI
- – Bonga Biosphere reserve
- – Fast Track Investments in the Forest Sector
- – Great Green Wall of the Sahel &Sahara Initiative
- – Bamboo sector
- – Global Green growth Initiative (GGGI)

Other New initiatives

- • Forest Sector Growth Program- EU (all regions)
- • Forest Sector Investment Portfolio- Norway (all regions)
- • Support from the GCF fund (all regions)
- • Charcoal production from Bagasse- sugar factories

In conclusion all these efforts need to be integrated at various levels for the same goal of protecting the country from the adverse effects of climate change and building a green economy and reaching the ambition of middle-income status by 2025.

The Ministry Leveraging resources from all possible sources to support achieving CRGE and GTPII targets commitment at various levels required capacity, prepare bankable documents and our absorption capacity should be strengthened to maximize the support of multilateral and bilateral partners.

- Land use planning required
- Strong structure required at lower levels to improve implementation

Source: CRGE, November 2011 and Report for EFDR Parlamentary member (2016 by Dr. Tefera Mengistu)