



Food and Agriculture  
Organization of the  
United Nations



Empowered lives.  
Resilient nations.

UN  
environment

UN-REDD  
PROGRAMME



# Guidelines on sustainable forest management in drylands of Ethiopia

2019

By **Stibniati Atmadja, Abeje Eshete, Manuel Boissière**

▶ **About 80% of forests in Ethiopia are dry forest.**

These forests are an integral part of Ethiopia's forest ecosystems, they range from dry Afromontane forests of the highlands in central Ethiopia, to the hot and dry woodlands in the Borana rangelands in southern Ethiopia. Most of the endemic wildlife in Ethiopia is found in dry forests; they are part of a delicate balance in unique ecosystems.

▶ **In the last 2 decades, dry forests are rapidly being replaced by other landuses, such as agriculture and settlements.**

Lack of arable lands in the more moisture-rich highlands, high population growth rates, and high demand for export-oriented agricultural products have led to large-scale conversion of dry forests into croplands and settlements. Dry forest biomes are experiencing the highest rate of forest loss in Ethiopia.



© A. Eshete

Woodlands dominated by *Boswellia papyrifera* are part of Ethiopia's dry forests. They are one of the main sources of frankincense in the world.

**At the national level, dry forests are perceived to contribute little in terms of direct income to households and income from exports.** Forests in drylands are less 'green', sparsely vegetated, and less densely populated. Dry forest products are poorly marketed, seen as inferior goods, and contribute little in formal employment generation and the formal economy. This led to the rapid conversion of forests into other landuses that are perceived to be more beneficial. Nevertheless, the goods and services provided by dry forests, and investments by local stakeholders in managing them have been poorly documented, monetized and understood compared to other landuses, such as agriculture. They are realized through long periods of time, and many do not have clear market values.

**Nevertheless, there are strong economic, social and environmental reasons to sustainably manage and protect dry forests that are not well understood by the decision makers and the public.** Ethiopia is a net importer of most commercial products, including wood products. This results in an acute shortage of foreign currency and a drive to support the production of export-oriented goods. Interestingly, Ethiopia is a net exporter of products abundantly found in dry forests, such as such as honey, gums and resins, and unprocessed bamboo. These goods contribute more than their fair share in generating much-needed foreign currency. Dry forests protect watersheds that supply water to hydroelectric dams essential for generating electricity in Ethiopia and neighboring countries. They are important sources of fuelwood and charcoal for rural and urban communities near and far, including many refugee camps. Most of Ethiopia's national parks and other protected areas are located in dry forest areas.



© A. Eshete

Livestock grazing in dry forests.

**Land use decisions need to take into account the value of dry forests in sustaining other economic activities, the cost of transportation in providing similar goods and services to far-flung communities, and the investments that communities and individuals have made in managing and protecting dry forests.**

Dry forests are habitat to a number of animals, trees, shrubs, grasses and herbaceous plant that are important for rural communities. Biodiversity in dry forest has made Ethiopia one of the world's biodiversity hotspots. They bring a wide range of products and environmental services that provide inputs to other sectors of the economy, and ensure the sustainable livelihoods of local communities. Ecosystem services include protection of water supplies, reduction of soil erosion, buffer against desertification, and provision of products such as fuelwood, charcoal, fodder, medicinal plants, bush meats, construction materials and famine foods. The cost-effectiveness of managing fodder from dry forests during droughts in isolated regions has never been valued and compared with alternatives such as transporting market-bought fodder from outside the drought area. The state legally owns almost all forests in drylands. In many cases, these forests have open access resources managed or used *de facto* by communities or individuals. They invested time, money and labor in monitoring, protecting and managing dry forests without clarity on their legal rights over those forests. These investments have never been monetized and considered in decisions affecting land use.

**The Government of Ethiopia has made sustainable forest management, including dry forests, a priority.**

The government has integrated forests in key national documents that guide policies, regulations, and actions in Ethiopia. This includes Ethiopia's [Climate Resilient Green Economy \(CRGE\) strategy](#), [Growth and Transformation Plan 2 \(GTP2\)](#), and the [Nationally Determined Contribution \(NDC\)](#) in mitigating and adapting to climate change submitted to the United Nations Framework Convention on Climate Change (UNFCCC). In 2013, the Ministry of Environment, Forest and Climate Change (MEFCC) was established. A system for Monitoring, Reporting and Verification (MRV) of emission reductions from forests is being established at the national and sub national levels. Ethiopia is one of the leading countries in Africa in implementing actions to reduce emissions from deforestation and degradation (REDD+). In 2018, a new forest proclamation was enacted, which has paved the way for shifting from forest conservation and protection to sustainable forest utilization and management to benefit a wider range of stakeholders, including local communities.



Women buying and selling fuelwood harvested from dry forests in Benishangul-Gumuz Regional State.

© M. Boissière

**This Guidelines on Sustainable Forest Management in Drylands of Ethiopia contributes to the sustainable management of dry forests by providing information on the national context on dry forests and practical dry forest management guidelines adapted to the Ethiopian context.**

The goal is to fill the information gap, which can allow decision-makers to understand better the true value of dry forests at the national level. Much of the literature on dry forests in Ethiopia is based on case studies in different parts of Ethiopia, or focuses on particular commodities with economic importance. This document provides a national perspective by stitching together information from the scientific and grey literature,

new analysis focusing on dry forests based on existing secondary data, comments and suggestions from key informants at the federal level, and from participants in two workshops held in Addis Ababa and Assosa.

The structure of this document is based on FAO's "Guidelines on Sustainable Forest Management in Drylands of Sub-Saharan Africa" (FAO 2010). Funding for this work is provided by the UN-REDD+ program through a technical assistance under the Food and Agriculture Organization of the United Nations (FAO), and implementation was conducted by the Center for International Forestry Research (CIFOR), in collaboration with MEFFC.

Cover: *Combretum-Terminalia* dry forest vegetation bursting to life during the rainy season. Metema, Amhara Regional State, Ethiopia. ©A. Eshete

This publication was made possible through support from Denmark, Japan, Luxembourg, Norway, Spain, Switzerland and the European Union.

[fao.org](http://fao.org) | [cifor.org](http://cifor.org) | [forestsnews.cifor.org](http://forestsnews.cifor.org)



**Food and Agriculture Organization of the United Nations**

**The Food and Agriculture Organization (FAO)**

FAO is the specialized agency of the United Nations that leads international efforts to defeat hunger. Its goal is to achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives. With over 194 member states, FAO works in over 130 countries worldwide. FAO's headquarters are in Rome, Italy.



**RESEARCH PROGRAM ON Forests, Trees and Agroforestry**

The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is the world's largest research for development program to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, ICRAF, INBAR and TBI.

FTA's research is supported by CGIAR Fund Donors: [cgiar.org/funders/](http://cgiar.org/funders/)



**Center for International Forestry Research (CIFOR)**

CIFOR advances human well-being, equity and environmental integrity by conducting innovative research, developing partners' capacity, and actively engaging in dialogue with all stakeholders to inform policies and practices that affect forests and people. CIFOR is a CGIAR Research Center, and leads the CGIAR Research Program on Forests, Trees and Agroforestry (FTA). Our headquarters are in Bogor, Indonesia, with offices in Nairobi, Kenya; Yaounde, Cameroon; Lima, Peru and Bonn, Germany.



Some rights reserved. This work is available under a CC BY-NC-SA 3.0 IGO licence

© FAO, 2019  
CA3752EN/1/03.19