

More broadly, the mandate of agroforestry currently falls between the cracks of various ministries and departments at the national, state, and local levels of the Ethiopian government. There is no coordinated implementation framework, no real vision for

## Opportunities for agroforestry development

While up-scaling of agroforestry in Ethiopia still remains a huge challenge, there are also a number of opportunities to encourage the practice to be more widely adopted. These include the following:

- Policy makers and members of the public are increasingly aware of the role that trees can play in watershed management, land rehabilitation and climate change mitigation. This increased awareness can gradually lead to agroforestry adoption by farmers themselves, albeit at a slower rate than anticipated.
- Current government green initiatives and climate support programs such as Climate resilient green economy, sustainable Land Management Programs, REED+ will create new opportunities to support agroforestry.
- Several non-governmental organizations – including the World Agroforestry Centre (ICRAF) and some projects in tertiary education and research institutions – are already

agroforestry, and no specific scheme to promote the practice among the country's farmers. Agroforestry will not spread unless it is supported by an efficient and effective governance system.

promoting agroforestry in Ethiopia.

- There is a high demand for tree products, including wood, fodder and other non-timber forest products.
- There is increasing number of University graduates with experience in natural resource management, forestry, and agroforestry.
- Recent improvements in land tenure security for farmers will encourage them to invest in strategies such as agroforestry that pay off in the long term.
- Agroforestry is placed as a directorate in the recently established Ministry of Environment, Forest, and Climate Change is also a directorate in the newly established Ethiopian Environment and Forest Research Institute. This is expected to improve the governance, research and coordinate the haphazardly scattered activities of agroforestry under different institutions.

## Recommendations

If agroforestry is to be adopted by farmers across Ethiopia, the practice needs to be actively supported by appropriate laws, policies, and institutions. To achieve this, the Ethiopian government should develop a National Agroforestry Policy to coordinate all of its work to promote the practice.

Under the umbrella of the national policy, a number of specific steps need to be taken:

- Expand the mandate of the Agroforestry Department to also work holistically on all aspects of agroforestry (including farmer extension, markets, technology development and promotion, etc.).
- An agroforestry mission or board comprising all related ministries should be set up to within the Ministry of Environment, Forest, and Climate Change to coordinate and oversee the implementation of agroforestry programs. The convening role should be assigned to the Agroforestry Department.
- A system of tax incentives and subsidies should be developed to support the development of tree-based enterprises within farmlands.

- Farmers should be supported in gaining access to markets for their tree products as well as enhancing their access to quality tree planting materials available in government run nurseries. Besides, a public-private partnership mechanism should be created to enable the large-scale production and distribution of seeds, seedlings, and other tree planting material.
- Local government units should intensify the promotion of agroforestry as a development strategy within their spheres of influence.
- Specialized extension services should inform farmers about the benefits of agroforestry. These should include farmer-to-farmer trainings, extension and trainings for other key stakeholders.
- Farmers' land/tree tenure should be made more secure, especially with respect to agroforestry trees.
- The further development of agroforestry should be based on learning the lessons from past and existing experiences.
- Agroforestry implementing bodies should follow up on the promise by the prime minister's office to plant one million *Faidherbia albida* trees as part of the evergreen agricultural activities.

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## Note

This policy brief is based on the Agroforestry Governance in Ethiopia report written by Emiru Birhane on behalf of the World Agroforestry Centre, which can be obtained by email to: [k.hagdu@cgiar.org](mailto:k.hagdu@cgiar.org)

## Reference

UI Hassan M. 2011. Analyzing Governance Reforms in Irrigation: Central, South and West Asian Experience. Irrigation and Drainage, 60(2): 151-162.



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# Agroforestry in Ethiopia: using trees on farms to boost crop productivity and strengthen food security



Ethiopian women planting tree seedlings at the rural resource centre in Ziway. Photo © ICRAF

## Introduction

Majority of Ethiopia's rural poor depend on subsistence agriculture for a living. Most of the country's smallholder farmers practice mixed crop and livestock farming and struggle to feed their families. This does not only result in vulnerable livelihoods, but also leads to draining of soil nutrients and makes soils prone to erosion and degradation. To remedy this, the Ethiopian government has tried to implement agriculture-led development strategies through its various rural development programs. However, these approaches have enjoyed modest success. Infertile soils and low farm outputs continue to characterize much of Ethiopia's rural landscape.

Agroforestry (AF) integrates trees into farming systems, which leads to sustainable agricultural intensification in

Ethiopia and one that the government should actively promote. By intercropping crops with trees, Ethiopian farmers can increase their yields, improve soil fertility, control erosion, protect biodiversity, and diversify their incomes. Trees and shrubs are critical assets for farmers especially in regions where climatic conditions are harsh or unpredictable.

Successful small- to medium-scale agroforestry projects have already proven that agroforestry can restore degraded lands and improve food security in Southern Ethiopia, Tigray, Oromia and Amhara, among other parts of Ethiopia. However, these are isolated success stories and they need the government's support to be scaled up across the country.

## Key Points

- Agroforestry can increase farmers' yields, diversify their incomes, and deliver several environmental benefits.
- The mandate for agroforestry is currently spread across a number of institutions. An

implementation framework should be established to coordinate their work.

- Number of government policies are not aligned and need to be harmonized under a single National Agroforestry Policy.



In Ethiopia, the governance of both farms and forests is changing. As the country implements a federal system of governance, power is shifting from national offices to regional and local structures, which are becoming more involved in the management of natural resources. The newly established Ministry of Environment, Forest and Climate Change has a department dedicated to agroforestry, which is a demonstration of the increased importance of the practice. These trends are creating new opportunities for the spread of agroforestry.

Before real progress can be made on that front, more clarity will be needed on both the policies and institutional arrangements that affect agroforestry in Ethiopia. A range of policies and proclamations (Table 1) have had an impact on the practice of agroforestry in Ethiopia. Some of these have a positive impact on the practice but others cause confusion or hinder it. Moreover, the mandate for agroforestry is currently spread across a range of institutions (Table 2) making it difficult to determine where responsibilities lie.

Table 1. Analysis of existing policies with regard to agroforestry (AF)

Policy	Policy objective	Relevance to AF	Supportive intentions with respect to AF	Appropriateness of institutional arrangements	Policy instruments are favorable to promote AF	Existence of suitable implementation arrangements	Impact on AF practice
Proclamation 542/2007	Promote sustainable use of forests	Aims to introduce AF to rural communities	+	-	+/-	+/-	+/-
Proclamation 456/2005	Promote sustainable rural land use	Aims to give farmers secure land tenure	+	-	+/-	-	-
Environmental Policy	Promote environmental sustainability	Identifies suitable species for AF	+	?	?	?	+/-
Energy policy	Ensure a sustainable supply of energy	Aims to expand AF to accelerate economic development	+	+/-	+/-	+/-	+/-
Proclamation 803/2013	Establish the Ministry of Environment & Forests	Sets up a Department of AF within the Ministry	+	+	?	?	?



Abreha We Atsbeha Landscape in Ethiopia. Photo © ICRAF/B. Cika

Table 2. Most relevant government institutions and their role in agroforestry

Institution	Role in agroforestry
Ministry of Agriculture and Natural Resources (MoANR)	Prepares policies and strategies for farmland, including soil management, conservation and wildlife management.
Oversees extension system and determines how agroforestry can be integrated into the agricultural landscape	Prepares policy and strategies for forests/agroforests and related landscapes. Home to the newly created Department of Agroforestry.
Ministry of Environment, Forest, and Climate Change (MEFCC)	Prepares policy and strategies for forests/agroforests and related landscapes.
Home of the newly created Department of Agroforestry	Conducts research that aims to provide market-competitive agricultural technologies to improve agricultural productivity, nutrition quality, sustainable food security, economic development, and conservation of natural resources and the environment. The institution takes a leading role in influencing the development of government policies related to agriculture and agroforestry.
Institute of Biodiversity Conservation Research (IBCR)	Responsible for scientific and applied research in the forestry/agroforestry biodiversity sector, supporting government policies.
Ethiopian Institute of Agricultural Research (EIAR)	Conducts research that aims to provide market-competitive agricultural technologies to improve agricultural productivity, nutrition quality, sustainable food security, economic development, and conservation of natural resources and the environment. The institution takes a leading role in influencing the development of government policies related to agriculture and agroforestry.
Ethiopian Environment and Forest Research Institute (EFER)	Conducts research that aims to provide market-competitive forest technologies to improve forest productivity, environment and wood quality, sustainable environmental security, economic development, and conservation of the forest, natural resources and the environment. EEFER takes a leading role in influencing the development of government policies related to forestry and agroforestry.
Ministry of Science and Technology (MoST)	Expected to create an agroforestry technology transfer framework that can promote capacity building on the use of agroforestry techniques.
Regional Bureau of Agriculture and Rural Development (BoARD)	Responsible for implementing agroforestry regulations at the regional level and managing the technical preparation of natural resource management plans.

Challenges of promoting agroforestry

Agroforestry has achieved isolated success in various regions of Ethiopia, but these achievements are yet to be scaled out across the country. The expansion of agroforestry in the country faces many constraints. Some of these include:

- Insecure land/tree tenure discourages investment in long-term crops such as trees, especially among tenant farmers. The land certification should provide entitlement to long term investments on the land such as the planting of multipurpose trees
- There is no system for agroforestry-based payments for ecosystem services.
- Current government policies promote the use of conventional crops only, and increased use of pesticides and chemical fertilizers.
- There are no certification standards for most tree-based products and their derivatives.
- There is a lack of adequate research and extension capacity on agroforestry.
- Farmers have poor access to tree seed and germplasm.
- There is a lack of focus on agroforestry in most Ethiopian universities.
- Most farmers are unaware of the multiple advantages that agroforestry offers.
- Market information systems in Ethiopia often do not include information about tree products, prices and marketing opportunities.

- The government has provided little support to farmers who want to add value to their tree-based products.
- Key stakeholders involved in supporting tree-based enterprises have been poorly coordinated.



Part of the ICRAF Ethiopia team participate in a tree planting event in Amhara Region, Ethiopia © ICRAF/Aklilu N. Mekuria