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MINISTRY OF AGRICULTURE

Ethiopian National Agroforestry Development Strategy (2026–2035)

Federal Democratic Republic of Ethiopia
Ministry of Agriculture – Natural Resource and
Development Sector
June 2025

Ethiopian National Agroforestry Development Strategy (2026–2035)

June 2025

**Federal Democratic Republic of Ethiopia
Ministry of Agriculture and CIFOR-ICRAF**



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List of Abbreviations and Acronyms

AEZ	Agro-ecological zone
AF	Agroforestry
AFR100	African Forest Landscape Restoration Initiative
AFD	Agroforestry development
BoA	Bureau of Agriculture
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanism
CIFOR	The Center for International Forestry Research
CIFOR-ICRAF	The Center for International Forestry Research and World Agroforestry
CRGE	Climate resilient green economy
FAO	Food and Agriculture Organization
EFD	Ethiopian forest development
GCF	Global Climate Fund
GDP	Gross domestic product
GTP	Growth and Transformation Plan
ICRAF	International Center for Research on Agroforestry
IFPRI	International Food Policy Research Institute
IPCC	Intergovernmental Panel on Climate Change
IWIM	Integrated Watershed Management Institute
MoA	Ministry of Agriculture
NAMA	Nationally Appropriate Mitigation Action
NAPA	National Adaptation Programme of Action
NGO	Non-governmental organization
NRMD	Natural Resources Management Directorate
NWAP	National Watershed and Agroforestry Multistakeholder Platform
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RED-FS	Rural economic development and food security

SDG	Sustainable Development Goal
SLMTC	Sustainable Land Management Technical Committee
SMART	Simple, measurable, achievable, realistic, and time-bound
SNNPRS	Southern Nations, Nationalities and Peoples' Regional State
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WRM	Watershed and rangeland management

Foreword

The agricultural sector is the backbone of Ethiopia's economy, and the primary means of livelihood for most of the rural population. However, despite its importance, farming in our country has for many years been largely small-scale and rain-fed. In addition, land degradation and population pressures negatively impact the sector. To tackle these challenges, the Government of Ethiopia developed its second Growth and Transformation Plan (GTP II), intending to achieve sustainable growth and transformation in agriculture. Within this framework, the natural resource and food security sector is tasked with managing efforts to reduce damage and enhance the productivity of natural resources. Agroforestry land-use practice is well-positioned to realize such overarching objectives, ensuring sustainable land and natural resource management while enhancing livelihoods and enabling adaptation to the changing climate. Globally, agroforestry is widely recognized and adopted as a sustainable land management system. It is a form of land utilization that has the potential to contribute significantly to national development goals such as food security and nutrition, sustainable economic development, and environmental protection. At present, deforestation and land degradation are serious environmental issues that impact heavily on people's livelihoods and the economic development of Ethiopia. Hence, it is imperative to adopt agroforestry strategies tailored to the country's diverse agro-ecologies to reverse this trend.

Ethiopia has a long-standing tradition of implementing agroforestry systems in an integrated and sustainable manner. Building on these rich experiences and responding to global trends that promote sustainable land use, the Government of Ethiopia has recently taken significant steps to scale up agroforestry practices at the national level, for example ensuring that 60 percent of tree planting through the Green Legacy Initiative consists of Agroforestry tree species. Upon the authorization of the government, the Ministry of Agriculture, whose mandate includes supervision over the utilization, protection, and management of all the country's natural resources (such as water, soil, and vegetation), in collaboration with relevant stakeholders, has developed a "National Agroforestry Development Strategy (NAfDS) and Action Plan (2026–2035)". This strategy will serve as a guideline to propel support for agroforestry extension across the country, with clear targets and directions. I wish to reaffirm the commitment of the government to creating an enabling environment for the realization of agroforestry development objectives envisaged in this strategy. I urge all stakeholders to play their respective roles in ensuring that Ethiopia's NAfDS is successfully implemented and monitored for an impactful result that can contribute to the prosperity of the country and its people.



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This National Agroforestry Development Strategy and Action Plan is the result of over a year of collaborative effort among a wide range of stakeholders. The initial draft was presented at a national multi-stakeholder workshop, enriched through regional consultations and refined through multiple revisions by technical working groups. Its successful completion was made possible through the technical expertise and financial contributions of our partners. We extend our sincere appreciation to all institutions and individuals whose commitment and support were instrumental in finalizing this strategy and action plan.

The Natural Resources Development, Protection and Utilization Lead Executive Office (NRDPU–LEO) of the Natural Resource and Development Sector expresses its gratitude to the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) alongside its funding organizations, specifically Irish Aid, the Packard Foundation, the European Union, and the Global Centre on Biodiversity for Climate – UK DEFRA, and NICFI through Norwegian Church Aid, who have been supporting agroforestry, integrated watershed management, greening and landscape restoration practices; as well as GIZ, and the World Bank for their technical and financial support provided throughout the strategy development process. Special appreciation also goes to the Liechtenstein Development Service (LED) for financing dedicated expert support under the agroecology TPP. The programme aims to transform food systems by mainstreaming agroecological principles, with agroforestry playing a key role in making agricultural food systems more sustainable, equitable, and resilient. Therefore, we would like to extend our sincere appreciation to the experts involved from these organizations and their respective funding agencies, and bring this strategy to its realization.

The NRDPU–LEO also appreciates senior experts and heads of the respective Bureaus of Agriculture and Natural resources of Amhara, Tigray, Oromia, Somali, Sidama, South Ethiopia, Central Ethiopia, Southwest Ethiopia, Gambella, Benishangul Gumuz, Afar, and Harari Regions, as well as representatives from various higher learning and research institutes for their active participation during the strategy development workshops and for providing valuable information. Finally, our deep gratitude goes to our NRDPU–LEO staff, specifically the Agroforestry Development Team and its seconded staff, for the guidance and persistent follow-up, and efforts in the conceptualization, development, and finalization of this strategy.

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Executive Summary

Approximately one-fourth of Ethiopia's landscape is either degraded or experiencing a high rate of degradation, adversely impacting about one-third of the country's population. Land degradation in the form of soil erosion and deforestation is among the major environmental and socio-economic problems in Ethiopia. It has resulted in reduced agricultural productivity and aggravated food insecurity and poverty in the country. Land degradation in Ethiopia has had significant economic and social consequences. Between 2001 and 2009, the estimated cost of land degradation was approximately USD 35 billion (Kirui and Mirzabaev, 2015). This staggering figure underscores the urgent need for sustainable land management practices to prevent further environmental deterioration. Beyond its economic impact, land degradation threatens food security and undermines the livelihoods of millions of Ethiopians. Historically, people have depended on the land for food and fiber. However, in recent years, increasing population pressure has placed even greater demands on farmland for food, fuelwood, construction materials, and additional land for cultivation.

Therefore, in response to these threats, the Government of Ethiopia, scientists, and non-governmental organizations have shown interest in finding ways and means to increase production and services on shrinking available agricultural land to meet increased demands at national and regional scales. In this regard, agroforestry systems that can combine the production of food, feed, fiber, and wood with ecological functions on the same land could offer new ways for farmers to respond to the need for more food and fiber and for diverse, renewable sources of energy, as well as the challenges of climate change. It can also create additional sources of income, spread farm labor throughout the year, and increase the productivity of those other enterprises while protecting soil, water, and wildlife. In the case of Ethiopia, indeed, protecting natural resources through promoting agroforestry as a land-use system is crucial. This national strategy document is prepared with the aim of mainstreaming and practicing agroforestry as a major land-use system in all regional states in the country. It is also aimed at guiding efforts for improving food security, livelihoods, and income generation while building a climate-resilient green economy that sustains natural resources.

This strategy highlights the state of agroforestry development (AFD) policies and strategies, practically for Ethiopian contexts. It identifies the main gaps and opportunities by assessing the existing agroforestry development situation in the country and identifying its strengths, weaknesses, opportunities, and threats. The strategy is built on analyses that explain systemic issues/bottlenecks in the subsector. Based on these, goals are set, and specific objectives are drawn. The proposed strategic intervention will investigate how agroforestry systems could sustain and continue the supply of goods and services by building on and strengthening existing traditional practices while significantly minimizing potential threats to agroforestry development.

This National Agroforestry Strategy (2026–2035), developed by the Ministry of Agriculture (MoA), serves as a comprehensive framework for all the respective actors, including regional bureaus of Agriculture, Natural Resources, Land, Environment and Forestry, and other implementing partners. This ten-year strategy employs a value chain approach, addressing all processes from agroforestry adoption, input supplies, and production to market, while being fully integrated with research and education and being applicable to all agroecological zones. It is expected to be updated based on changes in policy and development plans.

This strategy sets a vision that agroforestry is an accepted and integrated land-use system in the agricultural landscape of Ethiopia that contributes to food security, improved livelihoods, and income generation while building climate-smart systems that sustain the natural resource base.

The goal of the Ethiopia Agroforestry Development Strategy and Action Plan 2026–2035 is to enhance natural resource sustainability and community livelihoods by promoting the integrated use of trees and shrubs in farming systems and landscapes at large through a multi-sectoral, participatory approach.

The specific objectives of the strategy include:

- Organizing agroforestry units/departments in the institutional structure of the MoA and its respective bureaus in regional states (top to bottom) to take leadership roles in agroforestry programs, to promote agroforestry development activities, and to coordinate cross-sectoral collaboration and integration among implementing partners/stakeholders;
- Providing a framework for developing capacity and scaling up best agroforestry practices, and integrating scientific and local knowledge;
- Maintaining a long-term perspective and engagement for implementation of the agroforestry strategy;
- Developing incentives and mechanisms to compensate for the role of agroforestry in the provision of environmental services.

This strategy consists of **eight strategic objectives** along with expected results for the proposed interventions to be implemented.

Strategic Objective 1: Create an enabling policy environment and resourced institutional framework (structure and systems) to support the implementation of the strategy and enhance agroforestry development.

Expected results:

- a. Agroforestry (AF) is successfully integrated into relevant existing national and regional policies. Key policy barriers hindering AFD, such as uncontrolled free grazing, are definitively resolved or mitigated. A supportive and functional regulatory environment for AF strategy implementation is established.
- b. Dedicated institutional structures/units (federal ministry and regional bureaus) responsible for AFD are formally established, staffed, and adequately resourced. Strong ownership of AFD activities is cultivated within government and stakeholder institutions. Partnership and coordination mechanisms among implementing institutions and systems are significantly strengthened and operational.

- c. The government has formally incorporated AFD into its annual budget planning cycle. Sufficient financial and human resources are consistently allocated and deployed to support critical agroforestry research and development initiatives.

Strategic Objective 2: Enhance extension system, knowledge management, and communication for agroforestry.

Expected results:

- a. Agroforestry extension services are substantially strengthened to effectively promote the adoption and scaling up AF practices. A diverse and comprehensive range of AF awareness campaigns are successfully designed and employed to reach target beneficiaries.
- b. A functional knowledge management system (KMS) for collecting, synthesizing and disseminating relevant AF information and research is established and embedded in the institutional and research structures responsible for AF development.
- c. The capacity of extension staff and farmer facilitators in disseminating agroforestry knowledge and best practices are demonstrably strengthened through targeted training programs.

Strategic Objective 3: Establish and/or strengthen AF input supply system.

Expected results:

- a. Agroforestry input supply systems are assessed, and seed suppliers along with nurseries receive technical support and access to microcredit to ensure farmers have reliable access to quality planting materials.
- b. Private tree nurseries are established as income-generating opportunities for youth and women, thereby increasing the supply of planting materials and creating sustainable livelihoods.

Strategic Objective 4: Improve the production, productivity, and service roles of AF in all agroecological zones (AEZs) of Ethiopia through wide-range promotion (demonstration, dissemination, and implementation) of best-bet AF practices and technology packages.

Expected result:

- a. Best-fit agroforestry practices and technologies are packaged, promoted, and widely demonstrated across targeted areas (including sloping and degraded lands) and agroecological zones, leading to measurable improvements in land restoration, soil health and increased productivity.

Strategic Objective 5: Develop agroforestry value chains to facilitate smallholders' access to markets for agroforestry products.

Expected results:

- a. Comprehensive market studies and value chain analyses are conducted for key agroforestry products – clearly identifying and documenting profitable market opportunities.

- b. Private sector actors, farmer entrepreneurs, and associations are organized and actively engaged through Private Public Partnership (PPP) platforms to strengthen agroforestry value chain development and marketing.
- c. Access to credit and collective marketing support is facilitated for farmers and cooperatives, enhancing their competitiveness and profitability.
- d. Successful implementation of integrated agroforestry will establish a resilient resource base for apiculture through extending the nectar flow period. This will drive a verifiable increase in beekeeping production and productivity, resulting in accelerating youth and women entrepreneurship, enhanced financial resilience, and greater market competitiveness.

Strategic Objective 6: Strengthen innovative research and collaborations for agroforestry development.

Expected results:

- a. A national agroforestry research program is developed based on comprehensive gap analysis and participatory input from stakeholders.
- b. Scientific collaboration is strengthened at national, regional, and international levels to support research, specialized training, and knowledge exchange activities.
- c. Best-fit agroforestry technologies are successfully collated and/or generated through research, high-value tree species are formally identified, and relevant indigenous knowledge is systematically documented.

Strategic Objective 7: Create incentives for agroforestry adoption and partnerships.

Expected results:

- a. Incentive mechanisms and compensation schemes are developed for farmers. Communities adopting agroforestry are developed and supported by enabling legislation and institutional frameworks for effective implementation.
- b. Agroforestry practices are designed and promoted to ensure farmers receive income from companion crops during the initial years, successfully bridging the gap until tree components become productive.

Strategic Objective 8: Empowering women and youth through agroforestry development.

Expected results:

- a. Women and youth are empowered with the necessary knowledge and skills and actively engaged in agroforestry development and decision-making processes, leading to improved capacity and meaningful participation.
- b. Access to micro-credit and agroforestry extension services is improved for women and youth, ensuring their sustained active role in agroforestry and related value chains through an inclusive support strategy.

1 Background

1.1 Introduction

Land is a fundamental asset for sustainable development, bearing long-term environmental, social, and economic implications. Its use reflects the dynamic interplay between ecological and economic systems and is strongly influenced by economic decision-making (Hubacek and Bergh, 2002). However, in recent decades, land degradation – defined as the decline in land or soil productivity due to human activities – has emerged as a serious global concern. This degradation is occurring at a time when global demand for food, feed, and fuel is increasing rapidly, while the availability of arable land is diminishing in many regions (Gibbs and Salmon, 2015; FAO, 2025).

The global extent of degraded land is estimated to range from less than one billion to over six billion hectares, affecting up to 75 percent of the Earth's surface (Gibbs and Salmon, 2015). Despite this, agricultural production continues to grow. The complex distribution and nature of degraded

lands, however, remain a subject of debate, complicating mitigation efforts, especially as the need for sustainable food systems intensifies.

Population growth further accelerates land-use changes, often compromising ecosystem integrity and leading to biodiversity loss and reduced agricultural productivity (Harte, 2007; Slingenberg *et al.*, 2009). In many developing countries, deforestation and desertification have adversely affected agricultural outputs, ecosystem services, public health, and ecotourism opportunities (IPCC, 2007; Phelps, 2012). Without robust economic incentives for farmers and agro-industries, the restoration and productive use of degraded land become economically unfeasible (Gibbs and Salmon, 2015).

Land degradation severely undermines rural livelihoods by decreasing water availability and soil fertility, especially in Africa, where both population growth and poverty are high (Tadesse and Hailu, 2024; FAO, 2025). Key drivers of degradation in the region include soil erosion, deforestation, and unsustainable land management practices.

In Eastern Africa – including Ethiopia, Kenya, Malawi, Tanzania, and Uganda – land degradation poses a serious threat to food security and agricultural productivity (Kirui and Mrzabaev, 2014, 2015). For example, degraded landscapes account for 51 percent of land in Tanzania, 41 percent in Malawi, 23 percent in Ethiopia, and 22 percent in Kenya (Kirui and Mrzabaev, 2014, 2015). Between 2001 and 2009, the economic costs of land degradation were estimated at USD 35 billion in Ethiopia, USD 18 billion in Tanzania, USD 11 billion in Kenya, and USD 2 billion in Malawi – representing substantial proportions of national GDPs (Kirui and Mrzabaev, 2015).

In Ethiopia alone, approximately 25 percent of the total land area is degraded or highly susceptible to degradation, affecting nearly one-third of the population (Hurni *et al.*, 2010; Lemenih *et al.*, 2012). In response, the Government of Ethiopia, in collaboration with communities and partners, has made significant investments in landscape restoration. According to the Ministry of Agriculture (2024), interventions have been carried out in approximately 20,550 community watersheds, covering nearly 14.23 million hectares through various sustainable land management (SLM) initiatives under the first phase of the Ethiopian Strategic Investment Framework (ESIF-I) (Daniel, 2025).

Nonetheless, soil erosion, deforestation, and soil acidity continue to pose major environmental and socio-economic challenges in Ethiopia (Lemenih *et al.*, 2012; Mekuria *et al.*, 2015), contributing to declining agricultural productivity, food insecurity, and rural poverty (IFPRI, 2009). Farmlands are becoming increasingly overexploited as population pressure and demand for natural resources continue to rise (Maja and Ayano, 2021; Hurni *et al.*, 2010).

To address these challenges, the governments of Ethiopia, researchers, and development organizations are seeking integrated solutions to sustainably increase agricultural productivity, ensure food and energy security, and restore ecological balance. Agroforestry,

which is the integration of trees with crops and/or livestock on the same land, offers a holistic, climate-smart approach. Agroforestry systems support food, feed, fiber, and fuel production while enhancing ecosystem services such as soil fertility, water regulation, and biodiversity conservation. They also offer diverse income streams, distribute labor more evenly throughout the year, and improve the productivity of other farm enterprises (Dosskey *et al.*, 2012; Djanibekov *et al.*, 2015).

For Ethiopia, scaling up agroforestry practices is vital for achieving national development priorities related to environmental restoration, food security, climate resilience, and sustainable livelihoods. This National Agroforestry Development Strategy seeks to institutionalize agroforestry across regions and sectors, guiding coordinated efforts to build a green economy and restore degraded landscapes through the active participation of communities, government bodies, and development partners.

1.2 Concepts of Agroforestry

1.2.1 Definition

Agroforestry is a flexible land use system, involving both small and large-sized landholdings. Agroforestry emphasizes the integration of and interaction between different plants (trees and crops) and animal species rather than just focusing on each element individually, with the goal to increase the overall land productivity while maintaining the sustainability of the environment. Agroforestry has been practiced and implemented for centuries in different parts of the world at different spatial scales. It is characterized by an intimate combination of multiple species closely arranged in several overlapping canopy layers and association with crops and livestock (Bishaw and Abdelkadir, 2003; Raj Kumar *et al.*, 2023).

From the agricultural perspective, agroforestry is about recognizing and promoting trees and shrubs on farms; from the strict forestry perspective, it is about recognition and rights

for the tree-based systems and livelihoods that farmers establish and could expand with appropriate support. While agroforestry is a combination of agriculture and forestry, rather than treating these as separate land uses, institutions, policy domains, and fields of science, current practices integrate them in a landscape approach. Agroforestry is often an entry point to further social, economic, and farmer welfare, market, environmental stewardship, and political goals.

Based on these considerations, the first official definition of agroforestry was introduced by the International Center for Research in Agroforestry (ICRAF) in 1982. It was defined as “a deliberate growing of woody perennials on the same unit of land as crops and/or animals, either in some form of a special arrangement or sequence, which must consist of a significant interaction (positive or negative) between the woody and non-woody components of the system, either ecological and/or economical” (Lundgren 1982). It was later refined into this widely used definition: “a dynamic, ecologically based, natural resources management system that, through the integration of trees on farms and in the agricultural landscape, diversifies and sustains production for increased social, economic, and environmental benefits” (Leakey, 1996).

1.2.2 Classification of Agroforestry Systems

Agroforestry systems can be classified based on various criteria, with the most used being their structure and function (Nair, *et al.*, 2022). Structurally, agroforestry systems are categorized according to the composition and arrangement of their components. These include agro-silviculture (the integration of crops and trees), silvo-pastoral systems (which combine trees, pastures, and livestock), and agro-silvo-pastoral systems (which incorporate crops, trees, pastures, and livestock). In addition to these, specialized systems such as apiculture with trees, woodlots, fodder banks, and fruit orchards can also be identified. The arrangement of components may be temporal (over time) or spatial (across space),

with specific terms used to describe these patterns. On a functional basis, agroforestry systems are classified according to the primary roles and outputs of their components, particularly woody species. These functions can be productive – providing food, fodder, fuelwood, and other essential goods – or protective, such as enhancing soil fertility, preventing erosion, and offering shelter through windbreaks, shelterbelts, boundary plantings, live fences, and other conservation practices.

1.2.3 Benefits of Agroforestry

Agroforestry contributes to food security by providing multiple products and benefits to farmers (Satish *et al.*, 2024; Mokia *et al.*, 2025; Soil Asso., 2025). These benefits include food (fruit), timber, renewable wood energy, poles, fodder, stakes for climbing beans, and shade for livestock. Through its multi-functionality, agroforestry has considerable potential to:

- **Conserve biodiversity** – higher biodiversity than in conventional agriculture (including agro-biodiversity);
- **Combat land degradation and desertification** through erosion control and appropriate re-greening;
- **Contribute to addressing climate change** through mitigation (carbon storage is generally higher in agroforestry) and adaptation (trees may buffer microclimate experienced by crops), diversify production systems, confer resilience, produce a sustainable mix of renewable energy and food;
- **Enhance agricultural soil health and productivity** by increasing and sustaining soil organic matter and by promoting biological activity through the abundance and functional diversity of beneficial soil organisms;
- **Improve nutrient and water use efficiency** in agricultural production through increasing nutrient and water cycles and reducing leaching;
- **Diversify food sources** by providing a diverse range of nutrient-rich foods, increasing household access to essential vitamins and minerals beyond monoculture-based conventional agriculture;

- **Enhance dietary diversity and human health** by improving nutritional outcomes through increased access to a wider range of fruits, vegetables, nuts, and other crops, effectively addressing micronutrient deficiencies;
- **Diversify income streams** – Agroforestry systems strategically deliver diversified income streams by producing a variety of marketable goods, including high-value timber, fruits, nuts, medicinal products, fuel, and fodder, alongside traditional staple crops. This crucial multi-product output significantly cushions farmers against economic shocks, mitigating the financial risks associated with crop failure due to climatic events or exposure to volatile price fluctuations in a single commodity market, thereby enhancing overall household financial resilience.

Agroforestry is preferred for carbon sequestration and avoiding deforestation to contribute to green growth and build the resiliency of the climate. In addition, it contributes to the sustainable intensification of farmer livelihoods because it provides numerous products and ecosystem services.

These benefits make agroforestry a champion of sustainable and resilient agriculture. In most parts of the country, the farmers plant various tree species:

- Shrubs for erosion control on sloping lands, thus creating progressive terraces.
- Shrubs and trees for stabilization of terrace risers.
- Fertilizing trees for land restoration, improved soil health, and increased yields of crops through nitrogen fixation and tree biomass incorporation.
- Fruit trees, enset, coffee for improving nutrition and generating income.
- Fodder trees rich in proteins for improving livestock feeding, milk production, and manure quality.
- Timber trees for construction, boundary demarcation, and windbreak purposes.

- Trees and shrubs for renewable wood energy (firewood and charcoal) as a remedial strategy to fuel wood collection from forests and the use of crop residues and cow dung.
- Medicinal trees to cure health problems and fight diseases.

1.3 Policy Context of Agroforestry

1.3.1 Global Policy Context

Land degradation exacerbates flooding, droughts, deforestation, and loss of ecosystem services, thereby increasing vulnerability to impacts of projected climate change, particularly in Eastern Africa (Tadesse and Hailu, 2024; Sintayehu, 2018; Chidumayo *et al.*, 2011; Corbera *et al.*, 2010). Furthermore, land degradation could affect local and regional climate patterns. Deforestation reduces the amount of water released into the air by plants. This lowers moisture in the atmosphere, which can reduce rainfall and increase the risk of desertification (Cavelier *et al.*, 1997; Luo *et al.*, 2022). Changes in local climate patterns can have significant impacts on food production, especially in rural tropical areas practicing subsistence agriculture that wholly depend on rainfall, such as the semi-arid tropical regions of Ethiopia and other sub-Saharan countries (Gitz *et al.*, 2016). These widespread impacts of land degradation are primary motivations behind restoration programs and global initiatives, such as Reducing Emissions from Deforestation and Forest Degradation (REDD+). The potential of agroforestry to contribute to sustainable development has been recognized in international policy forums. For instance, the United Nations Framework Convention on Climate Change (UNFCCC, 2019) and the Intergovernmental Panel on Climate Change (IPCC) increasingly acknowledge it as a component of climate-smart agriculture. National Adaptation Programmes of Action (NAPAs) and Nationally Appropriate Mitigation Actions (NAMAs) identify agroforestry as an important component in agricultural sector actions.

Agroforestry systems have strong potential to support climate mitigation and adaptation, protect biodiversity and restore degraded land (Smith *et al.*, 2020). At global level, about 43% of agricultural land already has some tree cover. Increasing the number of trees on farms by just 10% could store more than 18 petagrams of carbon (Zomer *et al.*, 2022). Expanding agroforestry could also provide up to 0.31 petagrams of carbon each year, which is similar to the impact of other major nature-based solutions like reforestation (Terasaki Hart *et al.*, 2023).

Agroforestry can play a major role in restoring degraded land. Globally, about 2.2 billion hectares of degraded land could be restored. Of this, 1.5 billion hectares is best suited for mosaic restoration approaches like agroforestry, where trees and forests are combined with other land uses (FAO, 2022).

Agroforestry has been considered as an alternative land use system in the African Forest Landscape Restoration Initiative (AFR100), which targets the restoration of 100 million hectares of degraded landscapes by 2030 to boost food security, sustain ecosystem benefits of trees, and improve the resilience of local communities against the impacts of global climate change (Messinger and Winterbottom, 2016; www.afr100.org). Due to its multifunctional characteristics, agroforestry has been increasingly embedded into national/regional development programs and conventions as well as in different landscape restoration initiatives. Such recognition could trigger the spread of agroforestry practices across the regions where both government and non-state actors play different roles to maximize benefits from agroforestry.

Agroforestry is one of the cost-effective approaches for restoring degraded forests and agricultural lands, thereby contributing to landscape restoration and livelihoods. Thus, agroforestry can contribute to the achievement of several of the Sustainable Development Goals (SDGs): SDG15 – sustainably manage forests, combat desertification, halt and reverse

land degradation and halt biodiversity loss; SDG1 – no poverty; SDG2 – end hunger, achieve food security and improved nutrition, and promote sustainable agriculture; SDG6 – clean water and sanitation; and SDG13 – climate action. Moreover, high biomass production through agroforestry practices could improve the livestock industry, which in turn could play a significant role in attaining SDGs 1 and 2, SDG 3 (ensure healthy lives), and SDG 7 (production of biogas energy).

1.3.2 National Policy Context

The Government of the Federal Democratic Republic of Ethiopia (FDRE) has established a macroeconomic policy and strategy framework, “The Pathway to Prosperity” (Ethiopian National Strategy, 2020). Environmental sustainability is recognized in the Constitution and the national economic policy and strategy as a key prerequisite for lasting success, and natural resources are the foundation of the economy. Thus, in this context, agroforestry has been regarded as a land use practice that brings more effective sectoral integration in land, water, forestry, and livestock at the community level by integrating production (livelihood) with natural resource management endeavors.

It has identified agroforestry as an important strategic facet to reduce environmental degradation and to enhance the production of food and export commodities (e.g., fruits and medicinal products like moringa). In addition, to enhance agroforestry development, an inclusive National Watershed and Agroforestry Multi-stakeholder Platform (NWAMP) has recently been established (NWAMP, Wolde-meskel, 2019).

The Government of Ethiopia committed itself to several land restoration initiatives, including the Bonn Challenge (<https://www.bonnchallenge.org>), AFR100 (AFR100, 2016), the Land Degradation Neutrality National Targets, the Readiness Preparation Proposal, and the National REDD+ Strategy (<https://theredddesk.org/theme/legal-frameworks-redd>), where agroforestry

6 is indicated to be an important practice with potential for land restoration while improving productivity and diversifying economic opportunities.

There are specific policies, strategies, and guidelines that support AF development in the country, which are summarized below.

Table 1. List of national policies, strategies, and guidelines relevant to AFD

Policies, strategies, and guidelines	Relevance to AF development
Environmental Policy of Ethiopia https://www.moa.gov.et/wp-content/uploads/2024/08/ENVIRONMENT-POLICY-OF-ETHIOPIA.pdf	The document outlines Ethiopia's Conservation Strategy and Federal Policy on Environment, focusing on the sustainable management of natural resources and environmental protection.
Green Legacy Initiative for Sustainable Economic Development in Ethiopia (GLI) (https://eea-et.org/wp-content/uploads/2023/02/WP-10-2023.pdf)	The Green Legacy Initiative (GLI) was launched to combat deforestation and climate change through extensive tree planting. The initiative aims to restore degraded lands, increase forest cover, and contribute to sustainable economic development.
A proclamation to provide for the establishment of the Green Legacy and Degraded Landscape Restoration Special Fund, and to determine its administration	The document establishes the Green Legacy Degraded Landscape Restoration Special Fund in Ethiopia as a permanent financing mechanism to support landscape rehabilitation and sustainable development. The fund aims to promote environmental restoration, enhance ecological sustainability, create employment opportunities, and contribute to the achievement of international climate goals.
Ethiopian Strategic Investment Framework (ESIF-II)	ESIF-II-SLM is meant to improve the livelihoods and economic well-being of the country's farmers, herders, and natural resource (NR) users by scaling up SLM practices with proven potential to restore, sustain, and enhance the productivity of Ethiopia's land resources, to which AF development contributes a lot. AF is applied as much as possible in all community watersheds of the country, while at the same time integration between watersheds at a larger level is ensured, and due attention is given to the landscape approach as proposed in ESIF-II
Development, Management, and Utilization of Community Watersheds Proclamation (Proclamation No. 1223/2020) https://faolex.fao.org/docs/pdf/eth204275.pdf	This proclamation aims to enhance the management and utilization of community watersheds in Ethiopia to prevent environmental degradation and ensure sustainable resource use. It emphasizes the importance of community involvement in watershed management for food security and job creation
Watershed Development Strategy (Draft)	The watershed strategy outlines Ethiopia's National Strategy for Watershed Development, focusing on sustainable management of natural resources to enhance agricultural productivity and address land degradation challenges.

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Table 1. Continue

Policies, strategies, and guidelines	Relevance to AF development
<p>Watershed and Rangeland (WRM) Capacity Development: A Guideline https://www.moa.gov.et/wp-content/uploads/2024/11/Pastoral-area-Infotchs-Final-AB-Oct202020.pdf</p>	<p>The WRM's capacity development strategy is to guide and enhance effective, efficient, and sustainable national capacity development interventions of watershed and rangeland management at individual, organizational, and societal levels to improve sectoral performance. As per this capacity development strategy, the capacity to implement AF in the country should be created at individual, organizational, and societal levels.</p>
<p>National Horticulture Development and Marketing Strategy https://www.scribd.com/document/698636962/National-Horticulture-Development-and-Marketing-Strategy-FINAL-English-VERSION-1-Com</p>	<p>The strategy is aimed at boosting the sector's contribution to the economy, particularly through increased exports and improved food security. The strategy focuses on enhancing production, productivity, and marketing of horticultural products like fresh-cut flowers, fruits, and vegetables. It also addresses challenges such as limited land area for horticulture, post-harvest losses, and the need for improved infrastructure and quality assurance systems.</p>
<p>Community-based participatory watershed and rangeland development guideline http://slmpkmis.gov.et:8080/jspui/handle/123456789/30</p>	<p>The document is a guideline for community-based participatory watershed and rangeland development in Ethiopia, outlining planning steps, interventions, and technologies for sustainable land management. Watershed management has a long history in Ethiopia, with indigenous practices including agroforestry, bench terraces, and contour planting dating back to ancient times.</p>
<p>Agriculture and rural development policy. https://www.moa.gov.et/wp-content/uploads/2024/11/ARD-Policy-Printed-2.pdf</p>	<p>Ethiopia's Agriculture and Rural Development (ARD) policy focuses on export growth, increased private sector involvement, and sustainable land use, while also addressing the diverse needs of agricultural stakeholders, including smallholder farmers and large-scale commercial enterprises. The policy sought to advance agricultural transformation by fostering a strong foundation for investment, innovation, and systemic change.</p>
<p>Agricultural Extension Strategy of Ethiopia https://faolex.fao.org/docs/pdf/eth205099.pdf</p>	<p>The document outlines Ethiopia's Agricultural Extension Strategy, aimed at enhancing agricultural productivity and food security through a modern, demand-driven extension system.</p>
<p>Ethiopian National Drylands Restoration Strategy https://www.celep.info/wp-content/uploads/2023/02/PENHA-Ethiopia-drylands-restoration-strategy-WEB-.pdf</p>	<p>The strategy aims to restore and sustainably manage Ethiopia's dryland ecosystems, which cover over two-thirds of the country's land area. It emphasizes integrated natural resource management, community involvement, and policy alignment to enhance livelihoods and ecological resilience, where AF is the major practice in natural resources management (NRM).</p>
<p>Federal Democratic Republic of Ethiopia, Pastoral Development Policy and Strategy</p>	<p>This document presents Ethiopia's Pastoral Development Policy Strategy, which addresses the unique needs and challenges of pastoralist communities in Ethiopia. The strategy aims to harmonize existing sectoral policies and strategies to enhance pastoralists' livelihoods and resilience, with AF (silvo-pastoral practices) identified as an essential element.</p>

1.4 History of Agroforestry in Ethiopia

Agroforestry has long been an integral part of farming systems in Ethiopia, including within pastoral communities in semi-arid regions (Jiru, 2019). The country is home to various indigenous agroforestry systems, such as mixed cereal-livestock, agro-silvo-pastoral, and silvo-pastoral practices (Alemu, 2016). While Ethiopia's agroforestry is predominantly agrisilvicultural – featuring practices like scattered shade trees for coffee, home gardens, woodlots, and trees along farm boundaries – it also includes agro-silvo-pastoral systems that integrate livestock, as well as silvo-pastoral systems where trees grow scattered on grazing lands (Bishaw and Abdelkadir, 2003). These traditional land use systems serve as vital household strategies for securing food, fuelwood, and fodder and offer valuable models for promoting sustainable forestry and agriculture (Negash *et al.*, 2012; Tesfaye, and Negash, 2025). These integrated land use systems are thought to improve agricultural production by combining multiple crops and trees, which brings various ecological and economic benefits (Bishaw and Abdelkadir, 2003; Mokria *et al.*, 2025; Tesfaye and Negash, 2025). In this farming system, tree and shrub species are planted either sequentially or contemporaneously with an annual food crop, aiming to maintain soil cover, improve nutrient levels, increase soil organic matter, improve water infiltration, and provide a secondary source of food, fodder, fiber, and fuel (Alemu, 2016; Beedy *et al.*, 2010; Fahad *et al.*, 2022). Another promising agroforestry technology is biomass transfer and higher quality fodder production, thereby improving livestock productivity (e.g., milk) through a cut-and-carry system, which has no or minimal pressure on land (Mekonnen *et al.*, 2021).

Home garden agroforestry systems are among the most common forms of agroforestry in Ethiopia, particularly in the southern and southwestern regions (Degefa S., 2016). This land use system has been especially dominant in the Southern Nations, Nationalities, and Peoples' Regional State (SNNPRS) (Tefaye and Negash M. 2025). It is uniquely characterized by the integration of two native perennial crops – enset (*Ensete ventricosum*) and coffee (*Coffea arabica*) – alongside a variety of food crops, trees, and livestock, forming a multilayered agroforestry structure (Mellisse *et al.*, 2017). However, since the 1990s, this traditional system has been in decline, increasingly replaced by monoculture cash crop production. As a result, the contribution of trees, food crops, and livestock to household farm output and income has diminished (Abebe *et al.*, 2010; Gebrehiwot *et al.*, 2013; Sahilu, 2017).

The impact of agroforestry on livelihood improvement and environmental protection is being demonstrated in many regions in Ethiopia. Productivity is restored on degraded lands, and food security has been effectively achieved with agroforestry practices. Examples include the practice of enclosures combined with inorganic fertilizers and irrigation that double or quadruple crop production (Jama *et al.*, 2006; Mekuria *et al.*, 2011). Other examples include sustainable land management practices combined with fodder trees that are used in smallholder zero-grazing systems in ways that supplement or substitute commercial feeds in the Tigray, Southern Ethiopia, Oromia, and Amhara regions (Young, 1989; Jama *et al.*, 2006; Getachew *et al.*, 2022). High-value trees such as apples and tropical fruits, and medicinal trees have shown potential to lift rural farming communities out of poverty in Southern and south-western Ethiopia,

some parts of the Tigray and Amhara regions (Adane *et al.*, 2019; Yasabu, 2016). Fast-growing fuel wood, pole, or timber trees that are grown in various niches within the farm or across the landscapes and in commercial woodlots and plantations in some parts of the Amhara region and the Gurage highlands are used for generating income or to meet household wood demands (Bekele *et al.*, 2019). However, the benefits mentioned are minute compared to the potential that exists in agroforestry.

Some activities were also undertaken in Ethiopia in terms of research, education, and the organization of workshops in agroforestry development. These have been commendable efforts, but need to be strengthened (Kidane and Tesfaye, 2006). Overall, the existence of these systems has great potential for further development and the introduction of new agroforestry systems. However, barriers to adoption and out-scaling need to be addressed, including institutional, technical, socio-economic, policy, and governance issues.





2 Rationale for the Development of a National Agroforestry Strategy

Ethiopia's rapidly growing population, coupled with the heavy reliance of most households on wood for cooking and heating, places immense pressure on the country's natural forests. This dependency drives deforestation and degradation, threatening biodiversity, ecosystem services, and rural livelihoods. Agroforestry offers a viable, long-term solution to these challenges by integrating trees into farming systems to sustainably provide fuelwood, timber, food and other essential products while reducing pressure on natural forests.

Beyond its role in alleviating fuelwood scarcity, agroforestry contributes significantly to national development priorities. Well-designed agroforestry systems can enhance household incomes through diversification, support poverty reduction, and strengthen food, energy, and water security. They also play a critical role in

biodiversity conservation and climate change mitigation by increasing carbon sequestration both above and below ground.

To realize Ethiopia's vision of a climate-resilient green economy, it is therefore essential to scale up the adoption of agroforestry. The strategy will guide the promotion of agroforestry practices that maximize biological, economic, and environmental benefits. It will also provide directions on sustaining the supply of ecosystem goods and services by building on existing strengths while addressing barriers that hinder adoption and expansion.

Key challenges currently impeding agroforestry development include:

- Lack of policy and polity to address agroforestry development
- Inadequate functional units for AF in the organizational structure of the agricultural

and natural resource management sectors, particularly at the regional, zonal, and woreda levels

- Lack of investment for research and development in agroforestry
- Poor capacity (tools and infrastructure) and knowledge management
- Poor coordination among stakeholders and institutions
- Inadequate input supply system
- Lack of credit for AF development
- Weak market value chains and market information.

There is a clear lack of consistent understanding across sectors – such as agriculture, forestry, energy, water, and the environment – regarding the multifunctional and complex nature of agroforestry. This disconnect can lead to competition among sectors, rather than the collaboration and synergy that agroforestry requires. Despite its relevance, agroforestry remains insufficiently integrated into national policy frameworks, sustainable land use strategies, and rural

development programs. Consequently, its full potential to contribute to the national economy and the achievement of sustainable development goals has yet to be realized.

At present, agroforestry is primarily housed within the agricultural sector, but its mandate overlaps with other sectors – such as the Ethiopian Forest Development and others – which creates institutional fragmentation that hinders its effective advancement. As a result, agroforestry implementation lacks coordination. To address this, strategic actions and stronger coordination between key institutions – particularly within the agriculture and forestry sectors – are essential to align and integrate planning efforts. This document outlines the strategic activities needed to promote agroforestry development, defines the institutional framework, describes coordination mechanisms, and details the monitoring and evaluation system required to support its implementation.





3 Situation Analysis for the Adoption and Scaling-up of Agroforestry in Ethiopia

Agroforestry development in Ethiopia has encountered a range of challenges that hinder its sustainable growth and its role in natural resource management and development. To identify and understand these key challenges, a SWOT analysis – examining strengths, weaknesses, opportunities, and threats – was conducted.

This analysis drew on inputs from a stakeholder workshop, expert consultations, field assessments, and an extensive review of literature on agroforestry initiatives in Ethiopia. Its goal is to assess the current conditions affecting the adoption and expansion of agroforestry practices in the country, as summarized in the table below.

Table 2. SWOT analysis of agroforestry development in Ethiopia

Item	Strengths	Weaknesses	Opportunities	Threats
Policy Framework	<ul style="list-style-type: none"> • Agroforestry is mentioned in some policies/proclamations and strategies related to forestry, rural land administration, agriculture, energy, and land restoration policies • Ongoing formulation of policies and bylaws at the national level for watershed protection • Draft of a free-grazing policy formulated at the national/federal level • Enabling green economic policies • In some regions, the Acacia tree plantation program launched • Ongoing formulation of policies and laws that enable free market access for indigenous tree species 	<ul style="list-style-type: none"> • No AF policy and implementation strategy in Ethiopia • Lack of a well-consolidated strategic tool designed to promote agroforestry 	<ul style="list-style-type: none"> • Not as clear a term as “agroforestry,” but most of the roles of agroforestry are included in the ten-year national development plan: “A Pathway to Prosperity” • The NWAMP platform identified several agroforestry-related issues that require policy and strategy considerations, such as control of free grazing, supply of quality tree germplasm, fodder for livestock and bees, and cluster-based tree product marketing as an income generation mechanism for farmers and young people • Translating national policy to local conditions (formulate local by-laws) • Harmonization of policies for grazing management (livestock, trees and crops) • The newly innovative “The Green Legacy and Degraded Landscape Restoration Special Fund Proclamation” 	<ul style="list-style-type: none"> • The community may not accept the free grazing policy

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Table 2. Continue

Item	Strengths	Weaknesses	Opportunities	Threats
Institutional framework	<ul style="list-style-type: none"> • Establishment of the NWAMP • The existence of an agroforestry department both in EFD and the Ministry of Agriculture • World Vision is mainstreaming FMNR in all its area development programs 	<ul style="list-style-type: none"> • The mandate of agroforestry is given to both EFD and MoA, but emphasis is not given to agroforestry in either ministry, and there is a lack of ownership of the agroforestry sector • Resources are divided between the two ministries, and there is no strong collaboration between the two ministries • Inter-sectoral planning and coordination between the two ministries is negligible • Limited implementation capacity of partners and local institutions • Human resource capacity and institutional support for agroforestry are inadequate compared to other sectors (crops, livestock) 	<ul style="list-style-type: none"> • The recent establishment of the NWAMP is an opportunity to scale up the adoption of AF 	<ul style="list-style-type: none"> • Lack of coordination between institutions, organizations, and departments, and duplication of efforts

continue to next page

Table 2. Continue

Item	Strengths	Weaknesses	Opportunities	Threats
<p>Research, education, and extension, and capacity building</p>	<ul style="list-style-type: none"> • Presence of Research institutions: EIAR, EEFRI, ICRAF, and regional research institutes that can provide inputs and information • Agroforestry is available in the education curriculum in most agricultural colleges – Some universities have graduate programs in agroforestry and offer graduate courses 	<ul style="list-style-type: none"> • Inadequate investment in agroforestry R&D • The responsibility of the agroforestry extension system is not clearly defined for a specific sector at the local level • Agriculture and forestry extension systems engage in AF without adequate training and skills in agroforestry • Lack of training for agroforestry extension workers • Lack of adequate human resource capacity in agroforestry at the local level • Weak linkages between agroforestry research and extension • The extension system strategically does not provide extension service in agroforestry (crop-dominated extension system) 	<ul style="list-style-type: none"> • Local knowledge on agroforestry at the grassroots level can be tapped and utilized to support the adoption of improved practices 	<ul style="list-style-type: none"> • Water stress (shortage of water in each area that minimizes the survival rate of the seedlings) • Climate change impact
<p>Implementation on the ground</p>	<ul style="list-style-type: none"> • Control of free grazing in some areas • Livestock destocking through improved breeds • Distributing communal lands to landless groups (e.g., youth) • National dialogue on free grazing 	<ul style="list-style-type: none"> • Water stress (the shortage of water in each area that minimizes the survival rate of the seedlings) • Conflicts with livestock free grazing: Free grazing limits the survival and growth of tree/shrub seedlings 	<ul style="list-style-type: none"> • Use of efficient water harvesting and utilization practices and Integrated Watershed Management (IWM) 	<ul style="list-style-type: none"> • Water stress (shortage of water in each area that minimizes the survival rate of the seedlings) • Climate change impact

continue to next page

Table 2. Continue

Item	Strengths	Weaknesses	Opportunities	Threats
Seed and seedling supply system	<ul style="list-style-type: none"> • Tree seed centers establishment • Private seed suppliers • Availability of seed sources and distribution centers at the national and regional levels 	<ul style="list-style-type: none"> • Need for more tree nurseries • No quality assurance system for seeds • Limited availability of quality tree seed and germplasm 		
Land tenure arrangements	<ul style="list-style-type: none"> • To address the land security issue, the government is implementing land registration and certification reforms as an assurance to use farmland (not yet fully implemented) • Existing initiatives to support land ownership by women and the enforcement of government policies to ensure women have an equal opportunity to make decisions on land issues • The ongoing land certification process involves both men and women as an incentive for appreciating women's engagement in the management of trees on farmlands 	<ul style="list-style-type: none"> • Land is owned by the government, where farmers have only the right to use and rent out part of the land for short periods • The lack of well-defined property rights and land security has an impact on long-term farming decisions 	<ul style="list-style-type: none"> • The government exceptionally provided the forest-based mitigation Humbo project a legally binding document granting "tree user rights" because of the mandatory requirement to receive carbon finance incentives 	

Table 2. Continue

Item	Strengths	Weaknesses	Opportunities	Threats
Market and value addition	<ul style="list-style-type: none"> • Existence of environment-related journalist associations and different electronic and print media organizations 	<ul style="list-style-type: none"> • Lack of market information for tree-based products • Limited value addition to tree products • Limited value chains and markets for tree products • No quality standard guidelines to produce quality products that can be competitive in the market 	<ul style="list-style-type: none"> • Big market opportunity for moringa and other forest-based products in the local and international markets, e.g., Moringa stenoteppala, cultivated widely in parts of southern Ethiopia, and the Body Shop – an international chain with more than 2,000 shops worldwide – sells several products based on moringa, such as beautifying oil, body butter, shower gel, and soap • Carbon-marketing-related value chain 	<ul style="list-style-type: none"> • Long-term returns of agroforestry products limits farmers from investing in agroforestry or tree planting
Information, awareness, and communication	<ul style="list-style-type: none"> • Existence of environment-related journalist associations and different electronic and print media organizations 	<ul style="list-style-type: none"> • Lack of guidelines in local languages • Limited awareness-raising campaigns and training on the benefits of agroforestry at the local level 	<ul style="list-style-type: none"> • Universities in Ethiopia could offer an undergraduate and postgraduate degree in AF 	



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4 Scope of the Strategy

This document presents Ethiopia’s National Agroforestry Strategy, developed by the Ministry of Agriculture (MoA) to guide all relevant stakeholders, including NGOs and other implementing partners. The strategy takes a comprehensive approach, addressing the full spectrum of agroforestry development – from adoption and input supply to production, market access through value chains, and integration with research

and education. It is designed to be applicable across all agroecological zones of the country. Covering the period from 2026 to 2035, the strategy will serve as a national framework for advancing agroforestry. It will be periodically updated to reflect changes in ecological conditions, economic priorities, institutional arrangements, and policy directions.



5 Vision

To see agroforestry as part of the land use system on the agricultural landscape of Ethiopia and contributing to food security, restoring degraded forests and lands, improving livelihoods, and creating a sustainable economic foundation for all, while protecting the environment and mitigating natural disasters, through the systematic and integrated adoption of agroforestry practices across the nation.





6 Mission

To create an effective and efficient agroforestry land use system through developing, mainstreaming, adopting, and scaling up improved agroforestry technologies and practices, thus enhancing rural livelihoods and creating sustainable green economic development through environmental protection.





7 Objectives

7.1 The General Objective of the Strategy

The overall objective of the National Agroforestry Development Strategy is to enhance the sustainability and productivity of natural resources while also promoting changes in community livelihoods through a multidisciplinary, multisectoral, and participatory approach.

7.2 The Specific Objectives of the Strategy

The specific objectives of the strategy are:

- **To enhance food, nutrition, and income security** of smallholder farmers through diversified agroforestry systems.
- **To combat land degradation and deforestation** by promoting tree integration into farming systems.
- **To strengthen climate change adaptation and mitigation** through carbon sequestration and ecosystem restoration.
- **To build institutional and human capacities** to implement and scale up agroforestry practices.
- **To develop enabling policies and legal frameworks** that recognize and support agroforestry as a land use system.
- **To promote research, innovation, and knowledge sharing** on agroforestry technologies and practices.



8 Guiding Principles

- In enabling the principle of inclusiveness, agroforestry should consider not only farm-scale systems, but also include agroforestry as part of the broader landscape to contribute to natural resource, forestry, and agricultural policy objectives.
- Agroforestry systems are area and climate-specific – it is necessary to develop locally relevant agroforestry systems that consider the biophysical and socio-economic context (including land tenure) on a case-by-case basis and support both urban and rural agroforestry systems.
- Agroforestry should contribute to food, fodder, fiber, and energy domains.
- Agroforestry means different things to different people – an inclusive approach that recognizes traditional systems and indigenous knowledge as a basis for building locally sustainable systems is necessary.
- Beyond national interest, issues with the service role of AF also extend to the international domain in combating climate change.
- Knowledge and decision-making at a local level should be supported. The approach should be developmental rather than a macroeconomic focus – build people, not GDP.
- Indigenous species that can be applied in agroforestry systems should be identified and developed.
- The strategy should apply the SMART principles (simple, measurable, achievable, realistic, and time-bound); it should be implementable and realistic and have a horizon of 10 years.
- The strategy should prioritize strengthening systems and empowering people, rather than focusing on input distribution to beneficiaries. It should adopt a programmatic approach, move beyond short-

term, project-based interventions, and emphasize continuous learning and adaptation.

- It should involve participatory and evidence-based planning and implementation by empowering local communities through bottom-up planning, decision-making, and ownership of agroforestry initiatives.
- The market-oriented and value chain agroforestry development approach should be followed by support to access finance, markets, and inputs for smallholders and enterprises.
- The strategy should consider gender and youth mainstreaming.
- It should involve collaboration and harmonization with stakeholders to foster strong coordination across sectors and institutions (agriculture, forestry, environment, education, and finance) and mainstream agroforestry into broader national development frameworks (e.g., CRGE, NDCs, and food security strategies).
- It should involve the scaling out and scaling up of good practices and fostering institutional capacity to support research, extension, and innovation in agroforestry.
- It should respect and protect land and tree tenure rights, especially for smallholders and indigenous communities.





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9 The Ethiopian National Agroforestry Development Strategy

9.1 Strategic Framework and Theory of Change

As discussed under the situational analysis of the sub-sector, AF development in the agricultural system of the country has

faced systemic bottlenecks in a wide range of areas, such as political, institutional, implementation, financial, learning, and partnership conditions, for which strategic actions are proposed and summarized in the table below.

Table 3. Matrix of thematic areas and strategic actions to push AF forward in Ethiopia

Area	What	Key actors
Political conditions	Putting in place an agroforestry policy (and implementation guideline) that supports the planting of trees on farmlands	MoA, BoA, EFD, NWAMP, EBI
	Institutionalizing cross-sectoral integration and harmonization of existing policies.	MoA, BoA, EFD, NWAMP
	Formulate a policy on zero grazing	MoA, BoA, EFD
	Tree tenure rights to be incorporated into the existing land certification policy	MoA, EFD, BoA
	Promotion of legal marketing of tree products	MoA, EFD, NWAMP, Cooperative Agency
	Regulation of market prices of tree seedlings	MoA, EFD, Cooperative Agency

Table 3. Continue

Area	What	Key actors	
Institutional conditions	Sensitizing policymakers and implementers on the need and benefits of practicing agroforestry across different levels of relevant ministries, regional bureaus, and institutions	MoA, EIAR, ICRAF, NWAMP, EFD, universities	
	Strengthen a unit responsible for AF activities	MoA	
	Establish NWAMP in the different regions of the country	MoA, NWAMP, BoA, NGOs	
	Establish a tree seedling regulatory body that authorizes distributors	MoA, EFD, Cooperative Agency	
Implementation conditions	On the issue of free grazing	Limit the number of livestock per square unit and promote improved breeds	MoA, EIAR, regional research institutes, universities
		Develop and promote improved forage fodder species	MoA, EIAR, regional research institutes, universities
	On extension	Strengthening agroforestry extension services	EIAR, ICRAF, Ethiopian Forestry Research Institute, MoA, EFCCC
		Capacity building on agroforestry extension	EIAR, ICRAF, regional research institutes, EEFRI, universities
		Strengthening the linkage between agroforestry research and extension	EIAR, ICRAF, regional research institutes, EFD, universities
	On the seed supply system	Establishment of effective and reliable tree nurseries	EIAR, ICRAF, regional research institutes, EFD
		Supply quality assurance (standardization and certification) on seeds	MoA, EIAR, ICRAF, regional research institutes, EFD
		Support seed domestication, extension, and research on improvement and supply of indigenous tree species	EIAR, ICRAF, EFD, regional research institutes
	Market	Identify different products of AF and establish value chains for each product	EFD, regional research institutes, NGOs
		Strengthening public-private partnerships in the supply chain of agroforestry inputs and the marketing of products	MOA, NWAMP, EFD, regional research institutes
Financial conditions	Mobilizing resources for promoting AF	NWAMP, EFD	

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Table 3. Continue

Area	What	Key actors
Learning conditions	Comprehensive tree demand survey to inform on the supply	ICRAF, MoA – NR, EFD
	Awareness creation, training, and workshops targeting pastoralists and other livestock investors	EIAR, ICRAF, EFD,
	Facilitate farmer exchange visits (extension services and NGOs)	EIAR, ICRAF, MoA
	Facilitate 'expert farmers' to teach across Ethiopia (farmers teaching farmers)	EIAR, ICRAF, MoA
	Create a national AF movement through a massive campaign on public awareness	Publicity: videos, tech notes, radio, newspapers, television, and phones, supported and shared through government, NGOs, ICRAF, community groups, schools, churches, and mosques
Partnership conditions	Advising on appropriate mechanisms for ensuring efficient and effective use of resources and the minimization of overlap of activities among implementing partners, promoting agroforestry technologies and practices	NWAMP, MoA-NR

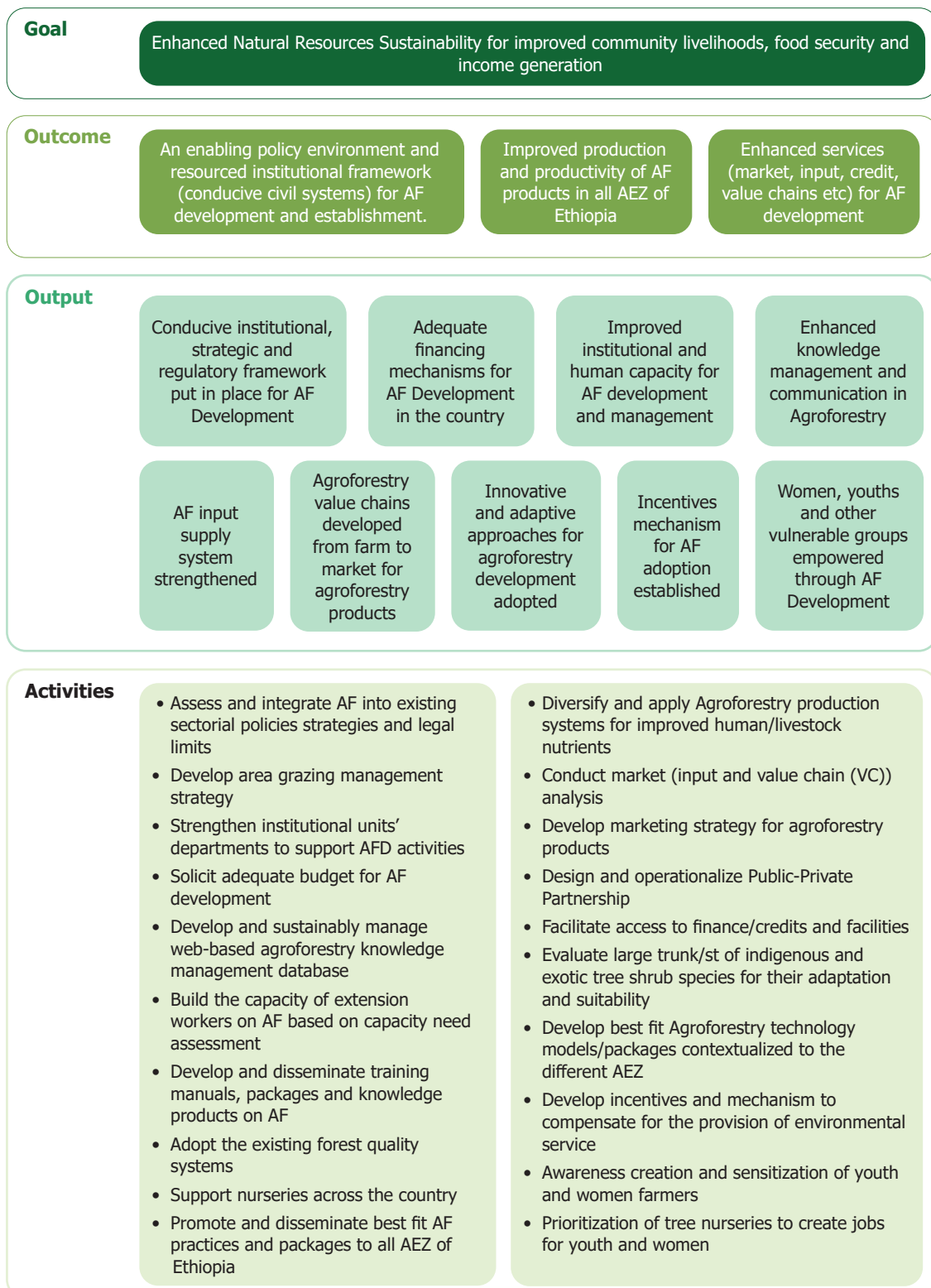
This strategy is meant to address these challenges over the next ten years (2026–2035). Its implementation will be aligned with the MoA's 10-year perspective agricultural sector development plan and the recently formulated land use policy for effective and successful AF development in the country.

The NRM sub-sector-specific strategic objective within the broader agricultural development plan includes the reduction of vulnerability to climate change, the building of a green economy, and the

creation of more rural employment, to which the AF development strategy in the country should align and contribute its share of the national agricultural production.

Thus, aligned with the agricultural sector development plan, this AF strategy is designed to improve the production, productivity, and services provided through AF development that enhances the sustainable development and use of natural resources to bring changes to the livelihood of the citizens of the country. The expected change from this strategy is depicted in Figure 1 below.

Figure 1. Theory of Change for the National Agroforestry Development Strategy



9.2 Strategic Objectives

9.2.1 Strategic Objective 1

Create an enabling policy environment and resourced institutional framework (institutional structure and systems) to support the implementation of the strategy and enhance agroforestry development

Bottleneck: lack of supportive policy and institutional arrangements for agroforestry development.

Given the integrated and multidisciplinary nature of agroforestry, institutional support and systems must be established. There is limited integration among stakeholders; different institutions that are responsible for its planning and implementation are moving separately. Units responsible for its follow-up and implementation have not been positioned appropriately. Although agroforestry is an old land use practice, the people responsible for its planning and implementation are operating independently, combining trees with crops and/or animals in the same land unit. Ethiopia has a rich source of examples of traditional practices, but these have not been housed in any specific ministry, thus, little attention is paid to their importance. This is also reflected in resource allocation. Compared to the crop production sector, no or limited budgets are allocated for agroforestry development activities.

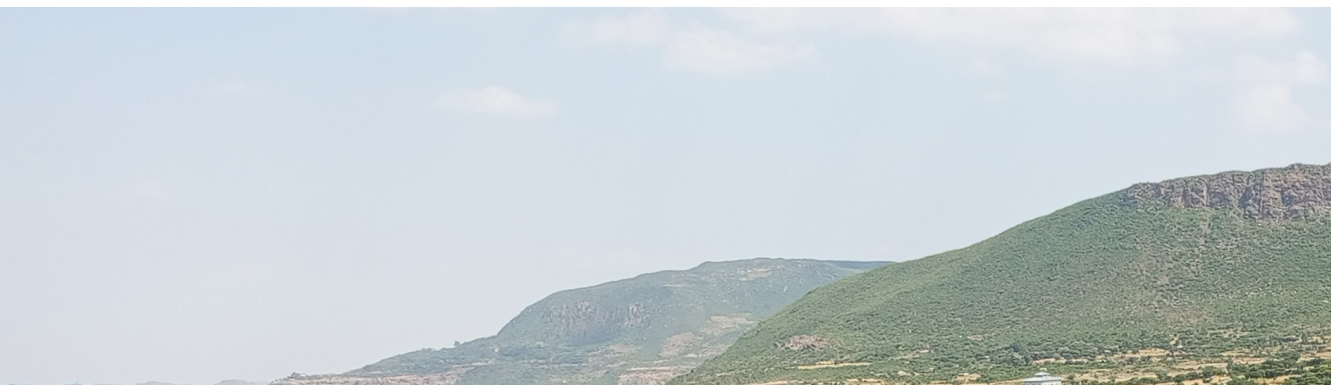
Strategic Interventions:

1. Formulate and Enact a National Agroforestry Policy and Legal Framework

- ✓ Develop and adopt a comprehensive national agroforestry policy that clearly defines mandates, roles, and responsibilities.
- ✓ Integrate agroforestry provisions into relevant sectoral policies and laws (forestry, agriculture, environment, land use, and climate change).
- ✓ Establish clear legal recognition of tree tenure and land rights to incentivize long-term investment in AF.

2. Establish and Resource Agroforestry Institutional Structures

- ✓ Set up a dedicated national agroforestry coordination unit or directorate within the Ministry of Agriculture (MoA).
- ✓ Strengthen regional agroforestry focal units with staffing, budget, and infrastructure to coordinate implementation at local levels.
- ✓ Promote inter-ministerial coordination platforms to align the planning and execution of AF programs.



3. Develop Agroforestry Implementation Guidelines and Standards

- ✓ Prepare national and AEZ-specific agroforestry technical guidelines, manuals, and extension packages.
- ✓ Establish quality assurance systems for seedlings, practices, and AF technologies.

4. Secure Sustainable Financing for Agroforestry

- ✓ Integrate agroforestry financing into national and regional budgets, ensuring consistent resource allocation.
- ✓ Mobilize funding from climate finance mechanisms (e.g., GCF, Adaptation Fund), development partners, and the private sector.
- ✓ Promote innovative financing models such as blended finance, PES (payment for ecosystem services), and landscape bonds.

5. Build Institutional Capacity and Human Resources

- ✓ Develop and implement a national capacity development plan for agroforestry institutions.
- ✓ Provide regular training for government staff, extension agents, and policymakers in agroforestry planning, M&E, and cross-sectoral coordination.

- ✓ Support research and academic institutions to integrate agroforestry into curricula and research agendas.

6. Establish Monitoring, Evaluation, and Learning (MEL) Systems

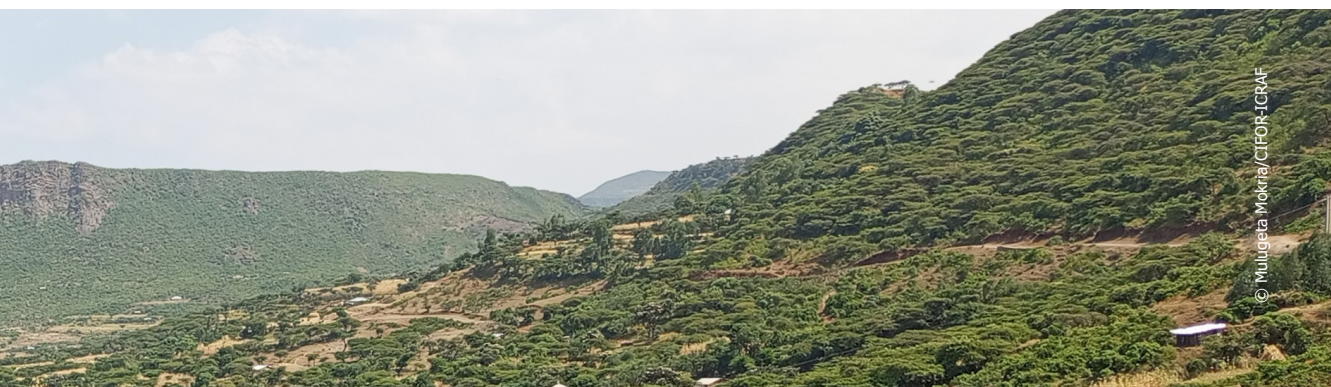
- ✓ Create a national agroforestry M&E framework with key performance indicators and reporting systems.
- ✓ Use GIS and ICT tools for data collection, analysis, and decision support.
- ✓ Promote adaptive management based on MEL feedback loops.

7. Promote Policy Advocacy and Stakeholder Engagement

- ✓ Facilitate multi-stakeholder policy dialogues involving farmers, CSOs, the private sector, and development partners.
- ✓ Raise awareness among policymakers about the economic, environmental, and social benefits of agroforestry.

Expected Outcome

The expected outcome is increased inclusion, empowerment, and livelihood opportunities for women, youth, and marginalized groups through equitable and sustainable agroforestry development in Ethiopia.



9.2.2 Strategic Objective 2

Enhance extension systems, knowledge management, and communication for agroforestry

Bottleneck: Poor extension system, knowledge management, and communication in agroforestry.

Agroforestry's multiple roles, systems, management practices, and benefits are not fully understood by all practitioners, technicians, managers, and decision makers. Information available on agroforestry is not made accessible or is not adequately disseminated to farmers. Farmers may have a low perception towards agroforestry for different reasons, including a lack of knowledge on the long-term environmental benefits of AF, increased labor requirements, delayed return on investment, etc. The linkages among research, academia, and extension workers, or in general among different stakeholders, are very poor, so that dissemination of technologies, knowledge, and information that contribute to further development and scaling of agroforestry is also poor.

Strategic Interventions:

1. Strengthen Agroforestry Extension Services

- ✓ Build capacity of extension agents on agroforestry systems, practices, and innovations.
- ✓ Develop and disseminate agroforestry-specific extension materials (manuals, toolkits, videos, and infographics).
- ✓ Integrate agroforestry into mainstream agricultural extension programs, including for the public and private sectors.

2. Promote Knowledge Management Systems

- ✓ Establish centralized agroforestry knowledge hubs or digital platforms for information sharing.

- ✓ Document traditional knowledge and best practices in agroforestry.
- ✓ Digitize agroforestry research outputs, case studies, and farmer success stories.

Enhance Communication Strategies

- ✓ Use ICT tools (mobile apps, SMS, community radio, and social media) to reach a wider audience, especially in remote areas.
- ✓ Develop localized communication materials in regional languages and culturally relevant formats.
- ✓ Apply participatory communication approaches, such as farmer field schools, demonstration plots, and peer-to-peer learning.

3. Multi-Stakeholder Collaboration

- ✓ Create platforms for collaboration among farmers, researchers, extension workers, NGOs, and government agencies.
- ✓ Establish public-private partnerships for scaling up successful agroforestry models and innovations.
- ✓ Strengthen research-extension-farmer linkages to ensure feedback loops and continuous learning.

4. Monitoring, Evaluation, and Learning (MEL)

- ✓ Establish MEL frameworks for tracking the effectiveness of extension services and communication strategies.
- ✓ Apply feedback mechanisms for continuous improvement of knowledge and communication systems.

Expected Outcome

Enhanced access to and effective use of agroforestry knowledge through strengthened extension services, leading to increased adoption of sustainable agroforestry practices, improved research-extension-farmer collaboration, and greater multi-stakeholder coordination and policy support.

9.2.3 Strategic Objective 3

Establish an AF input supply system

Bottleneck: Farmers' adoption of agroforestry is hindered if they cannot obtain the necessary inputs to promote it. Many species of agroforestry trees have poor germplasm quality, which limits the potential benefits. This situation should be addressed through research and improved or selected provenances should be made available to farmers.

Strategic Interventions

1. Strengthen and Decentralize Seedling and Germplasm Supply

- ✓ Establish and upgrade community-based and private nurseries in strategic AEZs to ensure year-round availability of diverse, high-quality seedlings (e.g., fruit trees, fodder trees, multipurpose species).
- ✓ Promote certification and quality control mechanisms for tree seeds and seedlings in collaboration with forest/agricultural research institutes.
- ✓ Develop a national database and seed zoning system for matching species to AEZ-specific needs.

2. Develop Input Supply Chains and Distribution Networks

- ✓ Facilitate the creation of agroforestry input distribution hubs at regional and woreda levels through partnerships with cooperatives, NGOs, and the private sector.
- ✓ Support efficient logistics and transport systems to reach remote areas, especially during planting seasons.

3. Promote Local Input Enterprises and Market Linkages

- ✓ Build capacity of local entrepreneurs, cooperatives, and youth groups to produce and sell inputs such as

compost, honey, tree seed, biochar, grafted seedlings.

- ✓ Facilitate access to finance and market platforms for small-scale input providers to expand operations.

4. Subsidies and Input Support Schemes

- ✓ Design targeted input subsidy programs (e.g., free or discounted seedlings for vulnerable farmers or priority landscapes).
- ✓ Integrate agroforestry inputs into existing agricultural input schemes at the federal and regional levels.

5. Policy, Regulation, and Institutional Support

- ✓ Develop and enforce standards and regulations for input quality (seedling vigor, species authenticity).
- ✓ Support policies that encourage private sector engagement in AF input production and delivery (e.g., tax incentives, start-up support).

6. Capacity Building for Input Supply Chain Actors

- ✓ Train nursery operators, extension agents, and cooperatives on nursery management, grafting, propagation, and species selection.
- ✓ Establish training-of-trainers (ToT) programs to scale input-related technical skills nationwide.

7. Digital Tools and Information Systems

- ✓ Deploy mobile and online platforms to track input availability, demand forecasting, pricing, and access points.
- ✓ Provide farmers with species selection guides and planting recommendations via SMS, apps, or printed guides.

Expected Outcome

Reliable, year-round access to diverse and high-quality agroforestry inputs across all

agro-ecological zones leads to increased adoption of agroforestry technologies, enhanced productivity and sustainability of farming systems, and stimulation of the growth of rural input supply enterprises and local economies.

9.2.4 Strategic Objective 4

Improve the production, productivity, and service roles and adoption of AF in all AEZs of Ethiopia through wider promotion (demonstration, dissemination, and implementation) of best-bet AF practices and technology packages involving a coordinated, multi-level effort to scale up the use of effective agroforestry practices

Bottleneck: Insufficient availability of effective agroforestry practice packages that have been validated for their service roles and for enhancing production and productivity within the various AEZs of Ethiopia, along with inadequate demonstration and dissemination efforts.

Strategic Interventions

1. Identification and Validation of Best-Bet AF Practices

- ✓ Conduct agro-ecological assessments to determine suitable AF systems (e.g., parkland systems, alley cropping, silvo-pasture, and home gardens).
- ✓ Validate and select proven AF technologies based on performance, scalability, and farmer preference (e.g., *Faidherbia albida*, *Sesbania*, multipurpose trees, and improved fodder species).

2. Zonal Customization and Adaptation

- ✓ Tailor AF practices to each AEZ's climatic, edaphic, and socio-economic conditions.
- ✓ Develop zonal AF packages (species mix, spacing, intercropping systems) with local stakeholder input.

3. Capacity Building and Knowledge Dissemination

- ✓ Train extension agents, development workers, and lead farmers on AF technologies.
- ✓ Establish farmer field schools (FFS), community-based learning platforms, and participatory trials.

4. Demonstration and Pilot Implementation

- ✓ Establish demonstration sites in strategic locations across AEZs.
- ✓ Facilitate participatory technology evaluation to increase farmer buy-in and feedback loops.

5. Policy and Institutional Support

- ✓ Integrate AF in regional and national development plans (e.g., CRGE, NDCs, GTPs).
- ✓ Develop or strengthen policy frameworks supporting tree tenure, land use, and incentives for adoption.

6. Incentive Structures and Input Support

- ✓ Provide starter kits (seedlings, tools, compost) for new adopters.
- ✓ Promote access to microcredit, subsidies, or performance-based payments for ecosystem services (PES).
- ✓ 4.7. Monitoring, Evaluation, and Learning (MEL)
- ✓ Develop indicators for tracking adoption, productivity gains, and ecosystem services.
- ✓ Use ICT (mobile apps, GIS) for real-time monitoring and feedback.
- ✓ 4.8. Scaling and Mainstreaming
- ✓ Leverage partnerships with NGOs, research institutions (like EIAR and universities), and private sector actors. Promote AF through media, farmer cooperatives, and national agricultural platforms.

Expected Outcome

Increased tree cover and biodiversity within farming systems enhance soil fertility, water conservation, and microclimate regulation, leading to improved household income, food and nutrition security, greater resilience to climate change, and the restoration of degraded landscapes.

9.2.5 Strategic Objective 5

Develop value chains to help smallholders access the market for their agroforestry products

Bottleneck: Poor market linkage for agroforestry products in the country; thus, smallholders lack access to market information and the market.

Strategic Interventions

1. Value Chain Mapping and Analysis

- ✓ Identify priority AF products with market potential (e.g., honey, gums/resins, coffee, spices, fuelwood, fruits, fodder).
- ✓ Map existing value chains to understand actors, linkages, bottlenecks, and opportunities.
- ✓ Analyze market trends, price structures, and demand at local, national, and export levels.

2. Market Linkage and Access

- ✓ Facilitate contract farming and linkages between smallholders and buyers (e.g., cooperatives, exporters, agro-processors).
- ✓ Support the formation and strengthening of producer cooperatives to aggregate products and negotiate better prices.
- ✓ Establish or expand digital platforms (e.g., mobile apps, market information systems) to provide real-time market prices and buyer contacts.

3. Infrastructure and Post-Harvest Handling

- ✓ Invest in rural infrastructure (storage facilities, feeder roads, marketplaces) to reduce post-harvest loss.
- ✓ Promote improved harvesting, drying, grading, and packaging techniques.
- ✓ Develop community-based processing centers for value addition (e.g., honey processing, essential oil extraction).

4. Capacity Building and Technical Support

- ✓ Train smallholders and cooperatives in business skills, quality standards, and certification processes.
- ✓ Build capacity for enterprise development (record-keeping, branding, marketing, financial literacy).

5. Access to Finance and Inputs

- ✓ Facilitate smallholders' access to microfinance, cooperative loans, and credit guarantees.
- ✓ Support blended finance models or revolving funds for small agroforestry enterprises.

6. Policy and Regulatory Support

- ✓ Advocate for enabling policies (e.g., tax breaks, simplified registration) for small-scale agroforestry businesses.
- ✓ Streamline access to permits and certifications for export (e.g., organic, fair trade, forest stewardship).

7. Promotion and Branding of AF Products

- ✓ Develop and promote national/regional branding for unique agroforestry products (e.g., Ethiopian forest coffee, frankincense).

- ✓ Facilitate participation in trade fairs, expos, and e-commerce platforms to broaden market access.

8. Public–Private–Community Partnerships (PPCPs)

- ✓ Encourage partnerships between the government, private sector, NGOs, and farmer groups for value chain development.
- ✓ Leverage CSR (corporate social responsibility) funding for community agroforestry initiatives.

Expected Outcome

Improved incomes and livelihoods for smallholders through value-added agroforestry products, supported by reduced market barriers, enhanced competitiveness in local and export markets, and the empowerment of rural communities through inclusive and sustainable enterprise development.

9.2.6 Strategic Objective 6

Strengthen innovative/adaptive research for agroforestry development

Bottlenecks: Limited financial resources for agroforestry research, lack of an agroforestry research program and human resources, little or no research efforts on indigenous tree species and low-quality germplasm, and lack of documentation on indigenous agroforestry practices and knowledge for application on AFD.

Few financial resources are allocated to support agroforestry research and development efforts because priorities lie in other agricultural focus areas. Specifically, the willingness to allocate funds for agroforestry research is minimal, indicating that little has been done in that field. The development of human resources in agroforestry is lacking; the quality of technical experts has yet to reach the necessary level of expertise in the country.

There is no agroforestry research program to address constraints amenable to AF at the different AEZs in Ethiopia. Scattered research efforts on agroforestry and screening of companion tree species in the past generated useful results on adaptable exotic trees and technologies. However, this has limited coverage and relevance (in view of the vastness of the country). Besides, AF research planning and design is not participatory, lacking focus on societal needs and grassroots problems.

There has been little or no research effort on indigenous tree species for use in agroforestry. Often, their growth and productivity are low and variable, and they are of low-quality germplasm. Research on indigenous tree species improvement and promotion, along with exotic species, is lacking.

Despite the vast indigenous knowledge and agroforestry practices found in the country, there has been little/no documentation of existing practices. Information on local AF practices is useful input while planning/initiating agroforestry research and for building on existing knowledge.

Strategic Interventions

1. Establish a National Agroforestry Research Agenda

- ✓ Develop a coordinated, multi-stakeholder agroforestry research strategy aligned with national priorities (e.g., CRGE, GTP, food security, and land restoration).
- ✓ Prioritize research areas based on AEZ needs, species selection, climate-smart AF systems, ecosystem services, and market-oriented AF models.

2. Strengthen Research-Extension-Farmer Linkages

- ✓ Promote participatory research models (on-farm trials, farmer-led experimentation, co-design of AF technologies).

- ✓ Create innovation platforms that link researchers, extension agents, NGOs, and farmers for joint learning and feedback.

3. Enhance Institutional Research Capacity

- ✓ Equip national and regional research institutions (e.g., EIAR, RARIs, universities) with funding, infrastructure, and skilled personnel.
- ✓ Support postgraduate training and mentorship in agroforestry sciences and related fields (soil science, ecology, and rural economics).

4. Promote Integration of Indigenous Knowledge and Scientific Innovation

- ✓ Document and test traditional AF practices for scientific validation and refinement.
- ✓ Facilitate collaborative learning between researchers and local communities.

5. Facilitate Multidisciplinary and Systems-Based Research

- ✓ Encourage collaboration among disciplines (forestry, agriculture, ecology, socioeconomics, and gender studies).
- ✓ Promote landscape-level research that captures interactions among AF systems, biodiversity, and livelihoods.

6. Develop and Maintain Agroforestry Databases and Knowledge Platforms

- ✓ Establish centralized databases on AF species performance, site suitability, and research outputs.
- ✓ Create open-access digital platforms for sharing AF research findings, guidelines, and decision-support tools.

7. Innovate through Climate-Resilient and Digital Technologies

- ✓ Research and pilot smart technologies for AF: remote sensing, decision support tools, and precision planting.
- ✓ Develop climate-resilient AF packages tailored to various AEZs and future climate scenarios.

8. Enhance Funding and Policy Support for AF Research

- ✓ Secure long-term funding from government, donors, and public-private partnerships for adaptive research.
- ✓ Advocate for policy incentives that promote research uptake and innovation diffusion.

Expected Outcome

Generation of location-specific, evidence-based agroforestry technologies, supported by stronger feedback loops between research and practice, leads to increased adoption of context-relevant, climate-resilient systems and enhances national innovation capacity for agroforestry-driven sustainable development.

9.2.7 Strategic Objective 7

Create incentives for agroforestry adoption and partnerships

Bottlenecks: Delayed return on investment in agroforestry (tree planting) and lack of knowledge or appreciation about the service role of agroforestry.

Many farmers are reluctant to practice agroforestry because of the delayed return on investment in tree planting (AF practices). Economic benefit from tree planting is realized in the long term, as opposed to immediate household income requirements to satisfy urgent family needs. Also, this has been indicated to be the main reason why farmers are less enthusiastic about the purposeful retention of trees on farmland (practicing AF) for ecosystem services, not because farmers lack knowledge (less perceived) of the long-term service roles that trees play in the environment.

Strategic Interventions

1. Design and Implement Incentive Mechanisms for Farmers

- ✓ Introduce performance-based incentives (e.g., Payment for

Ecosystem Services—PES, carbon credits) for farmers who adopt and maintain AF practices.

- ✓ Provide input subsidies or starter packages (e.g., seedlings, tools, compost, fencing materials) to reduce upfront costs of adoption.
- ✓ Offer land tenure security guarantees (e.g., tree tenure rights, land certification) to encourage long-term investment in trees on farms.

2. Develop Financial Access and Risk Mitigation Tools

- ✓ Facilitate access to microfinance, credit schemes, and insurance tailored to AF enterprises.
- ✓ Develop blended finance models with government and private sector contributions to de-risk investments in AF systems.

3. Promote Public–Private–Community Partnerships (PPCPs)

- ✓ Encourage joint ventures between private sector actors (e.g., agro-processors, exporters), communities, and government to co-invest in AF value chains.
- ✓ Mobilize corporate social responsibility (CSR) funds or green investments into landscape restoration and AF development.

4. Policy and Regulatory Support

- ✓ Advocate for the integration of AF incentives into national and regional development plans (e.g., tax breaks for AF enterprises, inclusion in climate adaptation funds).
- ✓ Simplify regulations around tree planting, harvesting, and marketing to make AF legally and economically viable for smallholders.

5. Promote Institutional Partnerships and Stakeholder Platforms

- ✓ Establish multi-stakeholder platforms to coordinate AF efforts among ministries (MoA, MoEFCC), NGOs, research institutions, and donors.

- ✓ Facilitate knowledge-sharing partnerships with universities, community-based organizations, and international organizations for scaling best practices.

6. Recognize and Reward Local Champions and Innovators

- ✓ Develop award schemes or recognition programs for model farmers, cooperatives, and local governments promoting AF adoption.
- ✓ Support community-led incentive models, such as savings groups linked to tree planting milestones.
- ✓ 7.7. Leverage Climate Finance and Global Partnerships
- ✓ Tap into international funding mechanisms (e.g., GCF, GEF, REDD+) to finance large-scale AF adoption and ecosystem service payments.
- ✓ Align AF incentive strategies with Ethiopia's Nationally Determined Contributions (NDCs) and Climate Resilient Green Economy (CRGE) goals.

Expected Outcome

Widespread adoption of agroforestry practices by smallholders and communities, driven by enhanced private sector participation, stronger institutional coordination, and multi-stakeholder engagement, contributes to scaled-up landscape restoration, increased carbon sequestration, and improved climate resilience through incentivized agroforestry solutions.

9.2.8 Strategic Objective 8

Empower women and youth through agroforestry development

Bottleneck: Less participation in decision-making and inadequate involvement of women and youth in agroforestry and rural development programs:

Although rural women and youth represent a large proportion of the Ethiopian population, they are less involved and marginalized in

agricultural development programs, lack equal access to production resources (land, credit, and technology), and do not benefit from employment opportunities. Women and youth should be given special attention (knowledge through training, access to microcredit, job opportunities) to take advantage of AFD undertakings.

Strategic Interventions

1. Ensure Inclusive Access to Resources

- ✓ Facilitate secure land and tree tenure rights for women and youth through legal reform and community-based advocacy.
- ✓ Improve access to AF inputs (e.g., seedlings, tools, credit) for women- and youth-led households or cooperatives.

2. Capacity Building and Skills Development

- ✓ Provide targeted training in agroforestry technologies, climate-smart agriculture, and natural resource management, tailored for women and youth.
- ✓ Establish agroforestry vocational and technical training programs in rural areas, including business development and leadership.

3. Promote Women- and Youth-Led AF Enterprises

- ✓ Support the formation of youth and women cooperatives or producer groups focused on high-value AF products (e.g., honey, spices, fruits, nurseries).
- ✓ Facilitate access to start-up grants, revolving funds, or green microfinance to launch or expand small AF businesses.

4. Mainstream Gender and Youth in Policy and Programs

- ✓ Ensure all AF development programs and policies include gender- and

youth-sensitive components, targets, and indicators.

- ✓ Promote representation of women and youth in decision-making structures (local forest committees, extension networks, and research platforms).

5. Facilitate Market Access and Innovation

- ✓ Provide market information, digital tools, and mobile-based services targeting women and youth entrepreneurs.
- ✓ Promote value addition and processing opportunities suitable for home-based or small-scale enterprises (e.g., dried fruit, herbal products, essential oils).

6. Promote Role Models and Peer Learning

- ✓ Identify and promote successful women and youth AF champions to inspire others.
- ✓ Facilitate peer-to-peer learning exchanges and mentorship programs within and across communities.

7. Address Social and Cultural Barriers

- ✓ Engage traditional leaders, elders, and men in behavior change communication to support gender and youth inclusion in AF.
- ✓ Integrate gender-transformative and youth empowerment approaches into community development processes.

Expected Outcome

Increased ownership, leadership, and income generation for women and youth in agroforestry systems, coupled with enhanced capacity and agency of marginalized groups, supports inclusive engagement in sustainable land management and value chains – reducing unemployment and rural-urban migration and fostering more equitable and sustainable agroforestry development in Ethiopia.



10 Implementing the National Agroforestry Development Strategy

This is the most important section of the AF strategy that details how to operationalize the agroforestry strategic objectives. It proposes key implementation issues around (1) coordination management and stakeholder engagement; (2) the financing mechanism for strategy implementation; (3) the Monitoring, Evaluation, and Learning system; and (4) risks and sub-components that enable those setup assumptions.

10.1 Coordination, Management, and Stakeholder Engagement

The implementation of the strategy, as it can be seen in the action plan, involves different stakeholders, like government sectors (federal, regional, zone, and woreda, to the grassroots level), academic and research institutions, development partners, NGOs,

the private sector, communities, etc. All these stakeholders need to be coordinated for their engagement in the implementation of the strategy. These stakeholders need to collaborate in networking, partnerships, and joint planning, implementation, monitoring and evaluation, and reporting to bring the desired outcomes. The key stakeholders include the Ministry of Agriculture (MoA), Ethiopia Forest Development (EFD), Cooperative Agency, Ethiopian Institute of Agricultural Research (EIAR), universities (Wondo Genet University and others), development partners, NGOs, and communities. The Ministry of Agriculture is the lead institution for the coordination and engagement of stakeholders in the AF strategy implementation. For coordination, existing coordination mechanisms like the Rural Economic Development and Food Security (RED-FS) and the National Watershed and Agroforestry Multi-stakeholder

Platform (NWAMP) can be used, and new modalities might be designed as needed for effective implementation. The Government of Ethiopia (Ministry of Agriculture) has been at the forefront of harmonization and alignment of development partner assistance. The Rural Economic Development and Food Security (RED-FS) agenda enables development partners to align their programs with government development programs. The RED-FS agenda has three subcomponents, or pillars, namely Food Security (FS), Sustainable Land Management (SLM), and Agricultural Growth (AG). Each pillar has its own Technical Committee (TC). Currently, the organizational setup of an agroforestry task force falls under the SLM TC. The task force and the national watershed and AF platform should be taken as an opportunity to plan, implement, monitor, evaluate, and report on agroforestry development. In addition, they can be used to review and discuss policies and strategic matters in a more detailed manner, as their objective is to reduce land degradation and improve the productivity of natural resources in respective technical areas (like agroforestry). The current institutional set up for agroforestry falls under the Ministry of Agriculture, Natural Resources Sector, under the Natural Resources Management Lead Executive (NRMLE). The agroforestry desk is established for overseeing AF development in Ethiopia. Similarly, regions, zones, and woredas have already, or should establish their institutional ethics and set up responsible bodies to implement the strategy. At the kebele level, there is already fertile ground with at least three development agents (crop, livestock, and natural resources) who are responsible for the day-to-day implementation of the strategy.

The NRMLE will be responsible for developing national plans and providing strategic guidelines/manuals for supporting agroforestry development efforts in the country. It will prepare extension packages for modernization (technology, processes, management practices, etc.), taking into account the country's contexts and legal

frameworks. It plays a key role in building capacity at all levels in the country. It is also mandated to coordinate stakeholders (through RED-FS) and regions involved in agroforestry development and ensure the availability and quality of planting materials (seeds and seedlings). It ensures that there is regular reporting by all concerned and attempts to build databases. It reviews and approves plans and reports from regional bureaus in line with national plans/targets.

10.2 Financial and Other Resource Requirements

Implementing the agroforestry strategy will require substantial financial resources and technical support. Identifying all potential funding options and establishing a systematic approach for long-term financing is therefore essential. The total financial requirement for implementing the strategy is estimated at USD 85,990,000, with a detailed breakdown provided in the action plan section below. This section outlines the potential funding sources that can be leveraged to support effective implementation of the strategy.

The Agroforestry Strategy forms part of the Federal Democratic Republic of Ethiopia's national development plan. Accordingly, the Government of Ethiopia is committed to financing its implementation through the 10-year development plan financing mechanism. Each sector is expected to allocate resources for agroforestry activities from its annual budget. In addition, many ongoing projects across government institutions have objectives that align with the Agroforestry Strategy; these projects may be able to finance selected components of the strategy. Another major opportunity in the Ethiopian context is the Green Legacy and Degraded Landscape Restoration Special Fund, established under Proclamation No. 1361/2024. This dedicated fund – financed annually at 0.5–1% of the national budget – supports green legacy initiatives and degraded land restoration. All government

sectors should be aware of this funding source and ensure that their project proposals incorporate elements of the Agroforestry Strategy. By doing so, they can secure sustainable, long-term financing for strategy implementation.

Another opportunity is to raise awareness of the AF strategy within the donor community. If donors express interest and willingness to support the strategy, proposals can be developed to secure their funding. In addition, aligning the AF strategy with global and regional development commitments would open access to international financing mechanisms – such as the Global Climate Fund – through proposals prepared by relevant government implementing agencies and submitted to designated international partners. Since agroforestry contributes to reducing climate change impacts, there may also be opportunities to access financing through carbon trading mechanisms.

10.3 Monitoring, Evaluation, and Learning

10.3.1 Monitoring and Evaluation Framework

Monitoring and evaluation indicators are central to the implementation of policies, strategies, and development planning in general. Thus, this AF development needs a robust and simple M&E system in place to monitor and evaluate strategic objectives prioritized in this document. A monitoring and evaluation framework is included as part of the action plan for implementing the strategy, which pinpoints a set of indicators¹ against which progress in AF priority actions, implementation status, and performance is assessed. The M&E system will monitor the implementation process of priority strategic actions and the results of the implementation process. The Theory of Change presented

under the strategic framework section serves as the basis of the result chain of this strategy and is attached in Table 6 for further refinement and action during the implementation of this AF strategy. It is going to be integrated into the performance evaluation, accountability, and reporting framework of the NRMLE. Some of the key monitoring and evaluation aspects of the AF strategy include:

- Provision of support necessary to establish comprehensive monitoring and implementation systems, tools, and capacities in the PPDs and/or NRMLE of the Ministry of Agriculture and regional bureaus.
- Regular reviews of National Agroforestry Development Strategy implementation at the country level (e.g., biannually and annually).
- Ensuring the incorporation of appropriate agroforestry development indicators and targets in work plans at federal, regional, zonal, woreda, and kebele levels.
- Integrating the recording, analysis, and reporting of AF data disaggregated by sex and age category within the established Agroforestry Development information management systems.
- Conducting or engaging in surveys, research, and evaluation to measure progress and document knowledge products for design and implementation of agroforestry development.
- Development of a performance monitoring and evaluation framework, baseline, and targets based on the AF strategy indicators. To this end, baseline, midline, and end-line evaluations should be done to properly document the process and achievement of results over time.

10.3.2 Documentation, Knowledge Management, and Learning

Learning, documentation, and knowledge management will receive due attention to ensure effective information flow and support evidence-based decision-making. Since agroforestry is implemented across

¹ A results framework with proposed key indicators is annexed in this strategy document

diverse agroecological zones, it generates a wide range of experiences that can inform knowledge sharing, innovation, and the scaling up of successful practices. Therefore, the national agroforestry program should be systematically documented and organized for learning and experience exchange. This includes documenting processes (planning, implementation, and M&E), identifying best practices, facilitating the sharing of experiences, and supporting the scaling up of proven approaches.

Documentation of the process

- AF product/technology and/or package development and their integration with other agricultural activities should be documented from the onset of the activities.
- Documentation should include a description of the activities or technology, site selection, implementation processes, follow-up mechanisms, technical quality, and the resulting outcomes for communities.
- Comprehensive documentation reports should be prepared and released annually.

Identification of best practices and scale-up

- Some woredas and communities may develop successful agroforestry products that significantly contribute to nutrition, climate change adaptation and mitigation, and livelihood improvement. These experiences should be shared with other communities.
- Best bet and effective agroforestry development practices should be identified and disseminated for scaling up where they are appropriate and adaptable.
- Documented best practices will be scaled up based on their suitability to different agroecological zones (AEZs).

Experience sharing

- Capacity building through experience-sharing visits among organizations and communities can provide practical, on-the-

ground learning and technical support to those implementing AF priority actions.

- Knowledge, skills, and results from innovative and adaptive AF practices – as well as insights on access to credit and markets – should be shared with less-performing woredas and communities to enhance their performance.
- Experience-sharing visits should be used strategically to improve operational efficiency and outcomes across communities.
- Participation in international experience-sharing workshops and forums on AF development can also be pursued.

10.4 Assumptions and Risks

Assumptions

Assumptions are a necessary condition for the achievement of AF priority actions. Some critical assumptions are as follows:

- AF will secure adequate financing over the next ten years.
- Severe drought and flood events do not cause large-scale disruption during AF strategic interventions implementation.
- Political, social, and economic stability in Ethiopia does not deteriorate and is expected to improve over time.
- Responsible sectors can respond and be accountable for the planning and implementation of AF-related priority actions identified in this AF strategy.
- Adequate capacity is expected to be created at all levels of implementation.

Risks

Several potential risks could affect the implementation of AF strategic interventions, and if not properly managed, could potentially jeopardize priority actions. Three categories of risks have been identified: financial, technical, and managerial. Each has been assessed for its likelihood of occurrence and potential impact, as summarized in the table below.

No.	Risk	Category	Probability (0–1)	Impact Category (1= very unlikely to 4 = very likely)	Response Strategy
1	Limited credit availability for AF product development	Finance (High probability, likely)	0.8	3	Strengthen financial institutions and make credit arrangements for AF input supply
2	Adequate funding for nursery (new and existing) development and innovative and adaptive research is not secured	Finance (High probability, likely)	0.8	4	Work closely with GLI government funding and develop a financing proposal to access funds from various sources
5	Security instability negatively affecting sector operational activities	Management	0.5	3	Identify insecure areas while undertaking AF priority actions
6	Expectations of stakeholders might be beyond the capacity to deliver AF strategic actions	Management	0.2	1	Manage AF priority actions regularly (monthly, quarterly, and annually)
7	Limited capacity of implementing agencies (MoA, EFD, research institutes, etc.)	Management and technical capacity	0.4	2	Undertake regular monitoring and ensure the capacity of different institutions
8	High staff turnover and movement of leaders from one place to another or from one sector to another	Technical capacity and management	0.5	2	Regular capacity building on AF extension systems packages



11 Action Plan

Effective implementation of the strategy requires an action plan that outlines the priority actions and expected outputs needed to achieve the strategic objectives. A designated coordinating institution will oversee these priority actions and be responsible for reporting

on implementation progress. Annual plans, developed jointly by relevant stakeholders, will guide execution. Timelines are established to ensure that activities are carried out as planned and on schedule, as outlined in this strategy (see Table 5 below).

Table 5. Implementation matrix of the AF development strategy showing strategic actions (SAs) under each of the strategic objectives (SOs), responsible bodies, timeframes and estimated budgets

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)	
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
Strategic Objective 1: Create an enabling policy environment and resourced institutional framework (institutional structure and systems) to support the implementation of the strategy and enhance agroforestry development	Assess and integrate AF into existing sectoral policies (land use, forestry development, etc.), strategies, and legal issues	MOA (NRMLE), EFD, and development partners												40,000
	Develop a free grazing management strategy	MOA (NRMLE), livestock sub-sectors, and development partners												100,000
	Strengthen institutional units and departments to support AFD activities and for the implementation of NAFSE at all levels	MoA and BoA												50,000
	Solicit adequate budget for AF development (prepare a proposal for accessing the Green Legacy and Degraded Landscape Restoration special fund)	MoA (NRMLE)												50,000

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)			
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		Y11		
Strategic Objective 2: Enhance extension systems, knowledge management, and communication for agroforestry	Develop and sustainably manage a web-based agroforestry knowledge management database	MoA (NRMLE), and development partners														200,000
	Exploit the national green legacy initiative to improve farmers' and communities' awareness of AF	MoA (NRMLE), BoA, and National GLI steering and technical committees														2,000,000
	Build the capacity of extension workers on AF based on the capacity needs assessment	MoA (NRMLE), EFD, and development partners														4,600,000
	Develop and disseminate training manuals, packages, and knowledge products on AF	MoA (NRMLE), EFD, research institutes, and development partners														3,500,000
Strategic Objective 3: Establish an AF input supply system	Study the existing input supply systems to identify limitations, how to provide support, and link with credit	MoA (NRMLE), EFD, research institutes, and development partners														50,000
	Support nurseries across the country to enhance quality tree seedling production for use in agroforestry systems in all AEZs	MoA (NRMLE), EFD, research institutes, and development partners														50,000,000
	Increase the supply of diverse tree species of high-quality germplasm with high value for planting in AF	MoA (NRMLE), EFD, research institutes, and development partners														8,000,000

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)		
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		Y11	
Strategic Objective 4: Improve the production, productivity, and service roles and adoption of AF in all AEZs of Ethiopia through wider promotion (demonstration, dissemination, and implementation) of best-bet AF practices and technology packages involving a coordinated, multi-level effort to scale up the use of effective agroforestry practices	Conduct comparative analyses on the potential returns on investment of different agroforestry practices/systems to facilitate informed promotion	MOA (NRMLE), research institutes, EFD, and development partners													500,000
	Promote and disseminate best-fit AF practices and packages to all AEZs through the application	MOA (NRMLE), BoA, research institutes, EFD, and development partners													4,000,000
	Mapping of degraded lands in all AEZs of the country for agroforestry application and land improvement	MOA (NRMLE), BoA, research institutes, EFD, and development partners													150,000
	Apply appropriate agroforestry technologies and soil and water conservation (SWC) measures on sloping and other degraded lands	MOA (NRMLE), BoA (NRM), and NGOs													500,000
	Diversify agroforestry production systems for improved human/livestock nutrition and increased household income through integration of fruit/fodder/timber/fuelwood trees (increase productivity of AF systems)	MOA (NRMLE), BoA (NRM), and NGOs													500,000
Identify and implement suitable agroforestry options for the integration and management of rangelands in lowland areas	MOA (NRMLE), BoA, research institutes, EFD, NGOs, and development partners													2,000,000	

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)	
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
Strategic Objective 5: Develop value chains to help smallholders access the market for their agroforestry products	Conduct market studies and value chain (VC) analyses to identify available markets for agroforestry products, and VC actors for AF products	MOA (NRMLE), BoA, research institutes, EFD, NGOs, and development partners												300,000
	Develop marketing strategies for agroforestry products (fruits, trees, livestock products, fodder, crops) and services	MOA (NRMLE), BoA, research institutes, EFD, NGOs, and development partners												300,000
	Design and operationalize public-private partnerships for promotion and marketing of agroforestry tree products (based on VC opportunities and value addition)	MOA (NRMLE), research institutes, EFD, and NGOs												100,000
Strategic Objective 6: Promote cluster-based production and organize collective marketing of agroforestry products, and strengthen support involvement of farmers' cooperatives in the VC	Promote cluster-based production and organize collective marketing of agroforestry products, and strengthen support involvement of farmers' cooperatives in the VC	MOA (NRMLE), EFD, and Federal Cooperative Agency												1,500,000
	Facilitate loans, credits, and facilities for farmers and their organizations to support the marketing of their agroforestry tree products	MOA (NRMLE), EFD, Federal Cooperative Agency, banks, MFIs, and input suppliers												250,000
Strategic Objective 7: Generate and disseminate agroforestry market information and data	Generate and disseminate agroforestry market information and data	MOA (NRMLE), BoA (NRM), and development partners												1,000,000

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)		
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10			
Strategic Objective 6: Strengthen innovative/adaptive research for agroforestry development	Conduct a gap analysis in agroforestry research and develop a national research program for agroforestry (taking into consideration past experiences, successes, failures, farmers' needs, land use, and AEZs)	MOA (NRMLE), research institutes, FRC, NGOs, and development partners													150,000
	Evaluate a large number of indigenous and exotic tree/shrub species for their adaptation and suitability (production and service roles) to agroforestry systems and different AEZs	MoA (NRMLE), EFD, NGOs, universities, NARS, FRC, and development partners													
	Strengthen institutional research, teaching, and education capacity in agroforestry through updating existing curricula, seeking research grants, and vocational training	MoA (NRMLE), EFD, universities, NGOs, and development partners													350,000
	Establish and strengthen linkages and partnerships within national institutions for the implementation of the research program	MoA (NRMLE), EFD, universities, NGOs, and development partners													600,000
	Develop best-bet agroforestry practices/models/research	MoA (NRMLE), EFD, universities, FRC, research institutes, NGOs, and development partners													2,000,000

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)			
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10				
Strategic Objective 7: Create incentives for agroforestry adoption and partnerships	Develop incentives and mechanisms to compensate for the provision of environmental services and design a strategy against delayed economic returns on investment in agroforestry	MoA (NRMLE)														350,000
	Develop innovative support structure and services in favor of agroforestry practitioners (smallholders and communities) by providing input subsidies (supply of quality germplasm, fruit seedlings), facilitated access to credits	MOA (NRMLE), BoA (NRM), and NGOs														
	Promote innovative local entrepreneurship to invest in agroforestry tree-based products and services by fostering the value-adding of suitable tree products	MOA (NRMLE), BoA (NRM), and NGOs														500,000

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Table 5. Continue

Strategic objectives	Strategic actions	Responsible body	Timeframe (2026-2035)										Estimated Budget (USD)		
			Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10			
Strategic Objective 8: Empower women and youth through agroforestry development	Awareness creation and sensitization of youth and women farmers on the advantages, roles, uses, and benefits of agroforestry, tree products, and their marketing	MOA (NRMLE), BoA (NRM), and NGOs													700,000
	Develop women-/youth-focused incentive and support structure so they engage in agroforestry tree-based production systems and businesses (products and services)	MOA (NRMLE), BoA (NRM), and NGOs													250,000
	Privatization of tree nurseries to create jobs for youth and women	MOA and NGOs													150,000
	Promote and support youth in the creation of small/medium-sized agroforestry enterprises in tree-growing	MOA (NRMLE), BoA (NRM), and NGOs													350,000
Total Estimated Budget													85,990,000		

Table 6. Results framework for the AF development strategy

Results Chain	Indicators
Impact/goal of the AF strategy	
Enhanced Natural Resources Sustainability for improved community livelihoods, food security, and income generation	Percentage share of AF in the agricultural GDP of the country
Strategic Outcomes of the strategy	
Strategic Outcome 1: An enabling policy environment and resourced institutional framework (structure and systems) to support agroforestry development established	Quality and availability of policy, strategy, and institutional framework for AF development Capacity of institutions for AF development
Strategic Outcome 2: Improved production and productivity of AF products in all AEZ of Ethiopia	Percentage change in AF production and productivity by AEZ
Strategic Outcome 3: Enhanced service (market, input, credit, value chains, information system, etc.) for AF development	Percentage satisfaction level of communities and stakeholders disaggregated by AF service type
Strategic Output of the AF strategy	
Strategic Objective 1: An enabling policy environment and resourced institutional framework (structure and systems) to support agroforestry development established	Number of existing national policies, strategies, and manuals into which AF integrated Number of new national policies, strategies, and manuals produced that support AF development Percentage share of the national agricultural expenditure budget spent on AF development
Strategic Objective 2: Enhanced extension system, knowledge management, and communication in agroforestry	Extent and quality of the agricultural extension system for AF development Web-based AF knowledge management system established Percentage of extension workers capacitated on the AF extension system Number of AF training manuals, packages, and knowledge products produced
Strategic Objective 3: AF input supply system strengthened	Extent of availability and quality of AF input Percentage of existing and new nurseries supported with enhanced quality tree seedlings Percentage of existing and new nurseries supported with diverse tree species of high-quality germplasm

Results Chain	Indicators
Strategic Objective 4: Enhanced production, productivity, and service roles of AF and adoption in all AEZs of Ethiopia	<p>Level of production, productivity, and service roles of AF disaggregated by AEZ</p> <p>Percentage of community members that have adopted AF practices</p> <p>Hectares of land covered by improved AF practices and technologies disaggregated by type (fruits, livestock, crops, etc.), and AEZ</p>
Strategic Objective 5: Agroforestry value chains developed for access to markets for agroforestry products	<p>Percentage of community members with market access and information for agroforestry products</p> <p>Percentage of community members with access to credit for agroforestry development</p>
Strategic Objective 6: Innovative and adaptive research for agroforestry development adopted	<p>Number of innovative and adaptive AF products/ technologies researched</p> <p>Number of context-specific and agroecology zone-based agroforestry packages and technologies identified and modelled</p>
Strategic Objective 7: Incentive mechanisms for AF adoption and partnerships established	Types and extent of incentive mechanisms put in place for the adoption of AF practices and technologies
Strategic Objective 8: AF Development	<p>Percentage of women, youths, and other vulnerable groups empowered through AF development</p> <p>Number and type of incentives provided for women, youths, and other vulnerable groups within a community</p> <p>Percentage of women and youths with tree nurseries</p>

References

- Abebe, B. et al. (2010) 'Landslides in the Ethiopian highlands and the Rift margins', *Journal of African Earth Sciences*, 56(4–5), pp. 131–138. Available at: <https://doi.org/10.1016/j.jafrearsci.2009.06.006>
- Adane, F., Legesse, A., Weldeamanuel, T., and Belay T. (2019) The contribution of a fruit tree-based agroforestry system for household income to smallholder farmers in Dale District, Sidama Zone, Southern Ethiopia. *Adv Plants Agric Res.* 2019;9(1): 78–84. <https://doi.org/10.15406/apar.2019.09.00415>
- Alemu, M. (2016) 'Integrated Watershed Management and Sedimentation', *Journal of Environmental Protection*, 07(04), pp. 490–494. Available at: <https://doi.org/10.4236/jep.2016.74043>
- Alemu, M. M. (2016) Indigenous Agroforestry Practices in Southern Ethiopia: The Case of Lante, Arba Minch. *Open Access Library Journal*, 3: e3278. https://www.scirp.org/pdf/OALibJ_2016122615551810.pdf
- Beedy, T.L. et al. (2010) Impact of *Gliricidia sepium* intercropping on soil organic matter fractions in a maize-based cropping system. *Agriculture, Ecosystems and Environment*, 138(3–4), pp. 139–146. Available at: <https://doi.org/10.1016/j.agee.2010.04.008>.
- Bekele, D. et al. (2019) 'Land use and land cover dynamics in the Keleta watershed, Awash River basin, Ethiopia', *Environmental Hazards*, 18(3), pp. 246–265. Available at: <https://doi.org/10.1080/17477891.2018.1561407>.
- Bishaw, B. and Abdelkadir, A. (2003) Agroforestry and Community Forestry for Rehabilitation of Degraded Watersheds on the Ethiopian Highlands" (2003). International Conference on African Development Archives. 78. https://scholarworks.wmich.edu/africancenter_icad_archive/78
- Cavelier, J. et al. (1997) 'Water balance and nutrient inputs in bulk precipitation in tropical montane cloud forest in Panama', *Journal of Hydrology*, 193(1–4), pp. 83–96. Available at: [https://doi.org/10.1016/S0022-1694\(96\)03151-4](https://doi.org/10.1016/S0022-1694(96)03151-4).
- Chidumayo, E. et al. (2011) Climate change and African forest and wildlife resources in African forestry, *Forum American Bar Association.* <https://www.cifor-icraf.org/publications/downloads/Publications/PDFS/B17122.pdf>
- Corbera, E., Estrada, M. and Brown, K. (2010) 'Reducing greenhouse gas emissions from deforestation and forest degradation in developing countries: Revisiting the assumptions', *Climatic Change*, 100(3), pp. 355–388. Available at: <https://doi.org/10.1007/s10584-009-9773-1>.
- Daniel Danano (2025) Sustainable land management and the Ethiopian Strategic Investment Framework. International Water Management Institute (IWMI) <https://www.slideshare.net/slideshow/esif-slm-network/7587160#1>
- Degefa, S. (2016) Home garden agroforestry practices in the Gedeo zone, Ethiopia: a sustainable land management system for socio-ecological benefits. In: UNU-IAS & IR3S/UTIAS 2016, Socio-ecological production landscapes and seascapes (SEPLS) in Africa. United Nations University Institute for the Advanced Study of Sustainability, Tokyo. pp. 28–37. http://satoyama-initiative.org/wp-content/uploads/2016/08/SEPLS-in-Africa_FINAL_lowres_web.pdf

- Djanibekov, U., Dzhakypbekova, K., Chamberlain, J., Weyerhaeuser, H., Zomer, R. J., Villamor, G. and Xu, J. (2015) Agroforestry for landscape restoration and livelihood development in Central Asia. ICRAF Working Paper 186. <https://research.fs.usda.gov/treesearch/52757>
- Dosskey, M., Wells, G., Bentrup, G. and Wallace, D. (2012) Enhancing ecosystem services: Designing for multifunctionality. *Journal of Soil and Water Conservation*, 67(2), 37A–41A. <https://doi.org/10.2489/jswc.67.2.37A>
- Ethiopian National Strategy, Ten Years Development Plan a Path to Prosperity, 2021–2030. <https://www.scribd.com/document/537337445/Ethiopian-National-Strategy-2021-2030>
- Fahad, S., Chavan, S. B., Chichaghare, A. R., Uthappa, A. R., Kumar, M., Kakade, V., Pradhan, A., Jinger, D., Rawale, G., Yadav, D. K. et al. (2022) Agroforestry Systems for Soil Health Improvement and Maintenance. *Sustainability*; 14(22):14877. <https://doi.org/10.3390/su142214877>
- FAO (2022) The state of the world's forests 2022: forest pathways for green recovery and building inclusive, resilient and sustainable economies. doi: 10.4060/cb9360en
- FAO (2025). The State of Food Security and Nutrition in the World 2025 – Addressing high food price inflation for food security and nutrition. Rome. <https://doi.org/10.4060/cd6008en>
- Fikrineh Negash (2012) 'Microbial quality and chemical composition of raw milk in the Mid-Rift Valley of Ethiopia', *African Journal of Agricultural Research*, 7(29), pp. 4167–4170. Available at: <https://doi.org/10.5897/ajar12.830>.
- Gebrehiwot, M. (2013) Recent transitions in Ethiopian homegarden agroforestry: driving forces and changing gender relations, Licentiate thesis Swedish University of Agricultural Sciences (SLU), Arkitektkopia Umeå. https://pub.epsilon.slu.se/10499/1/gebrehiwot_m_130603.pdf
- Getachew Abraham, Yisehak Kechero, Dereje Andualem, Temesgen Dingamo (2022) Indigenous legume fodder trees and shrubs with emphasis on land use and agroecological zones: Identification, diversity, and distribution in semi-humid condition of southern Ethiopia. *Vet Med Sci*. 2022 Jun 6;8(5): 2126–2137. <https://doi.org/10.1002/vms3.858>
- Gibbs, H. K. and Salmon, J. M. (2015) 'Mapping the world's degraded lands', *Applied Geography*, 57, pp. 12–21. Available at: <https://doi.org/10.1016/j.apgeog.2014.11.024>
- Gitz, V., Meybeck, A., Lipper, L., Young, C. D. and Braatz, S. (2016) Climate Change and Food Security: Risks and Responses. Food and Agriculture Organization of the United Nations (FAO) Report, 110, 3–36. <https://www.scribd.com/document/537337445/Ethiopian-National-Strategy-2021-2030>
- Harte, J. (2007) Human population as a dynamic factor in environmental degradation. *Popul Environ* 28, 223–236. <https://doi.org/10.1007/s11111-007-0048-3>
- Hubacek, K. and Bergh, van den (2002) 'The Role of land in economic theory', *International Institute for Applied Systems Analysis*, pp. 1–54. <https://pure.iiasa.ac.at/id/eprint/6748/>
- Hurni, H. and Wiesmann, U. (2010) Global Change and Sustainable Development: A Synthesis of Regional Experiences from Research Partnerships.
- Hurni, H., Abate, S., Bantider, A., Debele, B., Ludi, E., Portner, B., Yitafaru, B. and Zeleke, G. (2010) Land Degradation and Sustainable Land Management in the Highlands of Ethiopia. In book: *Global Change and Sustainable Development: A Synthesis of Regional Experiences from Research Edition: Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South*, University of Bern, Vol. 5 Publisher: Geographica Bernesia Eds: Hans Hurni, Urs Wiesmann. <https://doi.org/10.7892/boris.5902>
- IFPRI (2009) 'Options for Agricultural Growth for Poverty Reduction in Nigeria', Nigeria Strategy Support Program (NSSP) Background Paper No. NSSP 002 August 2009, p. 47. <https://cgspace.cgiar.org/>

- server/api/core/bitstreams/576ffd01-9044-47e2-bf31-b7fdaceee91d/content
- IPCC (The Intergovernmental Panel on Climate Change), Retrieved on 08-11-2025, <https://www.ipcc.ch/>
- IPCC (2007): Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R. K. and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp. https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf
- Jama, B., Elias, E. and Mogotsi, K. K. (2006) 'Role of agroforestry in improving food security and natural resource management in the drylands: a regional overview', *Journal of the Drylands*, 1(2), pp. 206–211. Available at: <https://www.researchgate.net/publication/228416939>
- Jarraud, M. and Steiner, A. (2012). Summary for policymakers, Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: Special Report of the Intergovernmental Panel on Climate Change. Available at: <https://doi.org/10.1017/CBO9781139177245.003>.
- Jiru, B. E. (2019) Review on Agro-forestry System and Its Contribution in Ethiopia. *International Journal of Sustainability Management and Information Technologies*. Vol. 5, No. 1, pp. 8–14. <https://www.sciencepublishinggroup.com/article/10.11648/j.ijsm.20190501.12>
- Kidane, B. and Tesfaye, A. (2006) 'Agroforestry practices and tree planting constraints and opportunities in Sekota district of the Amhara Regional State', *Journal of the Drylands*, 1(1). pp. 52–63.
- Kirui, O. K. and Mirzabaev, A. (2014) Economics of land degradation in Eastern Africa, ZEF Working Paper Series, No. 128, University of Bonn, Center for Development Research (ZEF), Bonn. <https://www.econstor.eu/handle/10419/99988>
- Kirui, O. K. and Mirzabaev, A. (2015) Costs of land degradation in Eastern Africa. In: 2015 Conference. August 9–14, 2015, Milan, Italy (No. 212007), International Association of Agricultural Economists. <https://ageconsearch.umn.edu/record/212007?v=pdf>
- Leakey, R.R.B. (1996). Definition of agroforestry revisited, *Agroforestry Today*, 8(1), 5-7.
- Lemenih, M., Kassa, H., Kassie, G. T., Abebaw, D. and Teka, W. (2012) 'Resettlement and woodland management problems and options: A case study from North-Western Ethiopia', *Land Degradation and Development*, 25(4), pp. 305–318. <https://doi.org/10.1002/ldr.2136>.
- Luo, X., Ge, J., Guo W., Fan L., Chen C., Liu Y. and Yang, L. (2022) The Biophysical Impacts of Deforestation on Precipitation: Results from the CMIP6 Model Intercomparison. *J. Climate*, 35, 3293–3311, <https://doi.org/10.1175/JCLI-D-21-0689.1>.
- Lundgren, B. (1982) Introduction. *Agroforestry Systems* 1(1): 3–6. <https://link.springer.com/article/10.1007/BF00044325>
- Maja, M. M. and Ayano, S. F. (2021) The Impact of Population Growth on Natural Resources and Farmers' Capacity to Adapt to Climate Change in Low-Income Countries. *Earth Syst Environ* 5, 271–283. <https://doi.org/10.1007/s41748-021-00209-6>
- Mekonnen, K., Bezabih, M., Thorne, P., Gebreyes, G. M., Hammond, J. and Adie, A. (2021) Feed and forage development in mixed crop–livestock systems of the Ethiopian highlands: Africa RISING project research experience. *Agronomy Journal*, 114 (1) <https://access.onlinelibrary.wiley.com/doi/10.1002/ajj2.20853>
- Mekuria, W., Channe, D., Addmasu, S., Akal, A. T., Guzman, C. D., Zegeye A. D., Tibebu, T. Y., Steenhus, T., and Ayana, E. K. (2015) 'Sustaining the Benefits of Soil and Water Conservation in the Highlands of Ethiopia', *International Water Management Institute*, 2014(03), pp. 2013–2016. Available at: <https://doi.org/10.13140/RG.2.1.1876.2328>.
- Mekuria, W., Veldkamp, E., Tilahun, M. and Olschewski, R. (2011) 'Economic valuation of land restoration: The case of enclosures

- established on communal grazing lands in Tigray, Ethiopia', *Land Degradation and Development*, 22(3), pp. 334–344. Available at: <https://doi.org/10.1002/ldr.1001>.
- Mellisse, B.T., van de Ven, G.W.J., Giller, K.E. et al. Home garden system dynamics in Southern Ethiopia. *Agroforest Syst* 92, 1579–1595 (2018). <https://doi.org/10.1007/s10457-017-0106-5>
- Messinger, J. and Winterbottom, B. (2016) 'African forest landscape restoration initiative (AFR100): restoring 100 million hectares of degraded and deforested land in Africa.', *Nature & Faune*, 30(2), pp. 14–17. Available at: <http://www.fao.org/3/a-i5992e.pdf> <https://www.cabidigitallibrary.org/doi/full/10.5555/20173036017>
- Mokria, M., Hagazi, N., Hadgu, K.M., Said, H., Abiyu, A., Hailemariam, G., Bräuning, A., Gebrekirstos, A. (2024) Homestead agroforestry for stabilizing food, economic and ecoclimatic nexus. *Agrofor. Syst.* 98, 3061–3074. <https://doi.org/10.1007/s10457-024-01074-8>
- NAMAs (Nationally Appropriate Mitigation Actions)- to Low Carbon Development in Agriculture: NAMAs as a Pathway at Country Level. Retrieved on 08-11-2025 from <https://openknowledge.fao.org/server/api/core/bitstreams/f1c94377-a4dd-4820-9a15-0e3c691bb502/content>
- Nair, P. K. R. (1993) *An Introduction to Agroforestry*. Kluwer Academic Publishers, Dordrecht, The Netherlands. <https://link.springer.com/book/9780792321347>
- Nair, P. K. R., Kumar, B. M. and Nair, V. D. (2021) Classification of Agroforestry Systems. In: *An Introduction to Agroforestry*. Springer, Cham. https://doi.org/10.1007/978-3-030-75358-0_3
- Negash, M., Yirdaw, E. and Luukkanen, O. (2012) Potential of indigenous multistrata agroforests for maintaining native floristic diversity in the South-Eastern Rift valley escarpment, Ethiopia. *Agrofor. Syst.* 85, 9–28. <https://doi.org/10.1007/s10457-011-9408-1>
- NPC (National Planning Commission), 2016. Growth and Transformation Plan II (GTP II). Addis Ababa Ethiopia. <https://www.greengrowthknowledge.org/national-documents/ethiopia-growth-and-transformation-plan-ii-gtp-ii>
- Phelps, J., Webb, E. and Adams, W. (2012) Biodiversity co-benefits of policies to reduce forest-carbon emissions. *Nature Clim Change* 2, 497–503. <https://www.nature.com/articles/nclimate1462>
- Raj Kumar, M., Veeraragavan, Kirttiranjan Baral, D. R. K., Saikanth, Veerendra Singh, Lalit Upadhyay and Sumit Raj. 2023. "Agroforestry and Its Potential for Sustainable Land Management and Climate Action: A Review". *International Journal of Environment and Climate Change* 13 (12):620–629. <https://doi.org/10.9734/ijec/2023/v13i123722>.
- Sahilu, M. G. (2017) Agroforestry home gardens in Ethiopia: rural livelihoods in transition, Faculty of Forest Sciences, School for Forest Available at: <https://pub.epsilon.slu.se/id/document/14079454>.
- Satish, P., Akshay, F. Madiwalar, Michelle, C., Lallawmkimi, K., Jaisimha Reddy, Shayma Parveen, Ashoka, P., Thejavath Laxman, M., Kiruba, and G. Anand. (2024) "Agroforestry: Multifunctional Benefits and Implementation Strategies". *Journal of Geography, Environment and Earth Science International* 28 (10):1–12.

- <https://doi.org/10.9734/jgeesi/2024/v28i10821>.
- Sintayehu, D. W. (2018) 'Impact of climate change on biodiversity and associated key ecosystem services in Africa: a systematic review', *Ecosystem Health and Sustainability*, 4(9), pp. 225–239. Available at: <https://doi.org/10.1080/20964129.2018.1530054>.
- Slingenberg, A, Leon, B, van der Windt, H. K. R. L. E. and Kerry, T. (2009) Study on understanding the causes of biodiversity loss and the policy assessment framework. European Commission, Brussels. <https://research.rug.nl/en/publications/study-on-understanding-the-causes-of-biodiversity-loss-and-the-po>
- Smith, P, Calvin, K, Nkem, J, Campbell, D, Cherubini, F, Grassi, G, Korotkov, V, Hoang, AL, Lwasa, S, McElwee, P et al. (2020) Which practices co-deliver food security, climate change mitigation and adaptation, and combat land degradation and desertification? *Global Change Biology*, 26, 1,532–1,575. doi: 10.1111/gcb.14878.
- Tadesse, A. and Hailu, W. (2024) Causes and Consequences of Land Degradation in Ethiopia: A Review *International Journal of Science and Qualitative Analysis*, 10 (1) pp. 10-21. <https://doi.org/10.11648/j.ijsqa.20241001.12>
- Tesfay, H. M. and Negash, M. (2025) Ethiopia: Enhancing Landscape Connectivity Through Agroforests. In: Lapin, K., Oettel, J., Braun, M., Konrad, H. (eds) *Ecological Connectivity of Forest Ecosystems*. Springer, Cham. https://doi.org/10.1007/978-3-031-82206-3_28
- Terasaki Hart, DE, Yeo, S, Almaraz, M, Beillouin, D, Cardinael, R, Garcia, E, Kay, S, Taylor Lovell, S, Rosenstock, TS, Sprengle-Hyppolite, S et al. (2023) Priority science can accelerate agroforestry as a natural climate solution, *Nature Climate Change*, 13,1,179–1,190. doi:10.1038/s41558-023-01810
- UNFCCC (United Nations Framework Convention on Climate Change). Retrieved on 23 Sep. 2019, from https://en.wikipedia.org/wiki/United_Nations_Framework_Convention_on_Climate_Change#Annex_I_countries
- Wolde-Meskel, E. and Bourne, M. (2019) Report on "Workshop for Establishing "National Watershed and Agroforestry Multi-stakeholder Platform (NWAMP)". Held on 11 Oct. 2019, at ICRAF-Addis Ababa, Ethiopia. <https://web.facebook.com/MoAEthiopia/videos/national-watershed-and-agroforestry-multi-stakeholder-platform-nwamp-workshop-ha/662063004287969/>
- Yasabu, S. (2016) Intensifying with high value trees in Africa RISING Ethiopia – some reflections from the first phase. Retrieved 30 August 2019. <https://desertification.wordpress.com/2016/11/07/high-value-trees-in-africa-rising-ethiopia/>
- Young, A. (1989) 'Part I. Soil Conservation and Agroforestry', *Agroforestry for Soil Conservation*, pp. 1–32. https://www.cifor-icraf.org/publications/downloads/Publications/PDFS/03_Agroforestry_for_soil_conservation1-160.pdf
- Zomer, RJ, Bossio, DA, Trabucco, A, Noordwijk, M and Xu, J (2022) Global carbon sequestration potential of agroforestry and increased tree cover on agricultural land, *Circular Agricultural Systems*, 2(3). doi:10.48130/CAS-2022-0003



Ethiopian National Agroforestry Development Strategy (2026–2035)

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