





Forest ecosystems provide a number of tangible and intangible services to humanity. They are a vital link in the water and carbon cycles and thereby contribute to the regulation of the local and global climate. In addition, forests are home to 75% of terrestrial biodiversity, with two-thirds in tropical rainforests. Several million human beings live in these ecosystems and are dependent on them. This is why it is essential to protect and develop them.

Know-how in common

Protecting and developing forests

Forests provide a number of services to humanity. They are called "ecosystem services", meaning that they are a resource that needs to be protected and developed in a sustainable manner. Expertise France works with its partners to preserve forest ecosystems and integrate issues related to them in the policies and governance of countries.

Forest-related ecosystem services

Forest ecosystems allow the infiltration of water into the soil and the regulation of soil erosion. Forests play a crucial role in the water cycle, by slowing surface water runoff, helping to retain moisture in surface soils and supplying groundwater reserves.

Forests, especially in tropical areas, can be equated with water towers, regulating the distribution of water over time. For example, in dense tropical rainforests, about 75% of rainfall is returned to the atmosphere through evapotranspiration.

Forests also play a crucial role in soil formation and maintenance and in the carbon and nitrogen cycles. Tree roots contribute to stabilising soil on river banks and in coastal areas and thereby secure the shorelines.

Finally, **forests play a key role in regulating both the local and global climate**. Forests absorb CO2 from the atmosphere through photosynthesis and release oxygen. This phenomenon produces organic matter which is a composite of wood. Globally, forests are the main terrestrial carbon sink. Forest soils and peatland forests (in wetlands) in particular account for a large proportion of this sequestration capacity (source FAO).



of total land area is made up of forests



of forests are in tropical areas



A wide variety of raw materials

Forests produce a number of traded goods, which are sources of income and employment. Wood is a raw material supplying the **lumber, energy wood and paper** industries. Forests are also a source of many other traded non-timber forest products.

In addition to wood production and all the uses derived from it, forests are the base for diverse food resources. It is estimated that the livelihoods of 1.6 billion people around the world directly or indirectly depend on forests.

Forest ecosystems also hold potential or exploited **genetic and pharmaceutical resources**. They are home to numerous species of flora, fauna, fungi and other known or unknown living organisms. Forest biodiversity is among the richest terrestrial biodiversity, but is still largely unknown, especially in tropical areas.

Finally, forests are a pillar of "cultural" services, places for recreation and tourism, providing educational, scientific, aesthetic, artistic, heritage and spiritual values. It is estimated that an area of 186 million hectares of forest worldwide is used for social services, such as recreational activities, tourism, training, research and conservation.

Mangroves: special and vulnerable forests in water

An interface between land and sea, mangroves provide a number of ecosystem services:

- Sources of supply and resources for neighbouring populations
- Protection against coastal erosion, marine submersion and extreme events
- · Carbon sinks (Nature-based Solutions).

They are home to abundant and unique biodiversity. In tropical regions, mangroves (mainly made up of mangrove trees which grow in shallow brackish water) cover almost 75% of coastlines. In 2020, FAO warned of the loss of 1.04 million hectares of mangrove areas between 1990 and 2020, related to demographic pressure and industrialisation.

Ecosystems threatened



of greenhouse gas emissions are caused by deforestation and the degradation of forest ecosystems



hectares of primary forests have been destroyed since 1990

Forests are endangered ecosystems, despite the vital services they provide to people and the planet. Some 420 million hectares of forests have been lost worldwide through deforestation since 1990 (FRA 2020, FAO). Tropical rainforests and primary forests have been particularly affected. Since 2020, deforestation and the degradation of forests have continued at an alarming rate.

The loss of forests is due to diverse pressures which vary across the globe. They include:

- The conversion of forests into farmland. Certain industrial crops are more land-consuming (livestock farming, palm oil, soya, cocoa...).
- The overexploitation of forest resources for various uses (lumber, energy wood, paper industry...), as well as mining.
- The fragmentation and artificialisation of territories (urbanisation, road infrastructure...).
- · Climate change and its consequences (higher incidence of megafires, droughts, extreme climate events...).
- The proliferation of invasive species, diseases, parasites and pests.

These pressures can be directly or indirectly related to anthropogenic factors. They are likely to lead to a total loss of forests or weaken their ecosystem functions (forest degradation). Expertise France helps improve the understanding of these threats to forests and develops solutions tailored to needs.

Our operating methods

Expertise France supports the establishment of a **governance conducive to sustainable and responsible action** for forests. It promotes and facilitates the **mobilisation of the necessary financial resources**. It takes action at the local, national and regional levels, and includes local communities and indigenous knowledge.

It helps build the capacities of authorities and field operators by:

- Providing specific technical expertise
- Sharing experience among peers
- Improving and sharing knowledge
- Building networks among actors
- Implementing collective experimentation
- Supporting the initiatives of civil society organisations.



Expertise France develops an approach tailored to the context and needs of partners based on six lines of action for biodiversity:



Implementation of sectoral public policies



Support for transitions towards sustainable natural resources management



Development, management and networking of protected areas



Mainstreaming of biodiversity in public policies and business strategies



Support for actors in ecological restoration



Action for initiatives with climate and biodiversity co-benefits.



Our lines of action

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Support for public policies

Expertise France assists governments and local authorities with the implementation of their sectoral public policies for biodiversity.

Examples of projects:

- Morocco Ghabati, Hayati: Assisting the Kingdom of Morocco with the implementation of its national strategy for forests through training workshops and the mobilisation of targeted technical expertise. For example, this allows the acquisition of data for the national forest inventory. [Agence française de développement funding]
- Latin America EUROCLIMA: Assisting Bolivia and Peru with an analysis of public policies on forest, biodiversity and climate change issues. Mobilising expertise to build the capacities of local actors on the same issues. [EU funding]
- Côte d'Ivoire Climate project: Supporting the priority sectors of Côte d'Ivoire's Nationally Determined Contribution (NDC) to the Paris Agreement, with a focus on the forest sector for the achievement its climate targets (e.g.: reforestation of 3 million hectares of forests by 2030). [EU funding]







Support for protected areas

Expertise France assists with strategic planning for protected areas, as well as capacity building and networking for the managers of these areas in partner countries.

Examples of projects:

- Latin America EUROCLIMA: Assisting Guatemala and Honduras with the creation of a binational ecological corridor and a biosphere reserve with community logging concessions. Assisting Bolivia with the creation of a voluntary protected area by a local community in Chiquitania. [EU funding]
- Indian Ocean VARUNA: Assisting Madagascar and the Comoros with the creation of territorial Living Labs for the adaptive joint management of forest biodiversity on three pilot protected area sites for the development of innovations (technical and social), reconciling conservation and the development of forest systems, in partnership with the French agricultural research and cooperation organization (CIRAD). [AFD funding]

Our lines of action



Ecological restoration

Expertise France supports ecosystem strategies and restoration activities to improve ecological functions and ecosystem services related to ecological integrity and ecosystem connectivity. These activities also help tackle soil artificialisation, deforestation and desertification.

Examples of projects:

- Morocco Ghabati, Hayati: Assisting Morocco with the reforestation of 50,000 hectares. [AFD funding]
- Latin America EUROCLIMA: Assisting Argentina, Bolivia, Paraguay and Brazil with the definition of local plans for the restoration of degraded areas. [EU funding]







Sustainable natural resources management

Expertise France supports transitions towards practices for agroecology, agroforestry, sustainable aquaculture and so on. The objective is to combat deforestation and the artificialisation of territories.

Examples of projects:

- Morocco Ghabati, Hayati: Supporting Morocco's "energy wood" policy by monitoring the use of improved stoves. The objective is to promote the sustainable management of forest resources for local communities. [AFD funding]
- Latin America EUROCLIMA: Assisting with the analysis of the forestry model of community logging concessions in order to develop a sustainable management model for forests and biodiversity in Guatemala. [EU funding]

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Biodiversity mainstreaming

Expertise France supports the integration of issues concerning biodiversity and the preservation of natural resources in economic and financial sectors.

Examples of projects:

- Multi-countries BIODEV2030 [AFD funding]:
 - 1. Assisting Ethiopia, Guinea, Kenya and Uganda with multi-stakeholder dialogues at country level for the formulation of commitments on the wood energy sector in order to protect biodiversity.
 - 2. Helping Benin, Guinea and Vietnam integrate biodiversity in lumber production.
- Latin America EUROCLIMA: Supporting the introduction of payments for ecosystem services in Peru based on Costa Rica's experience. [EU funding]



#6



Climate and biodiversity co-benefits

Expertise France supports the deployment of initiatives combining joint benefits for the fight against climate change and against the collapse of biodiversity, such as the deployment of "Nature-based solutions".

Examples of projects:

- The Caribbean RESEMBID: Supporting the reforestation of coastal areas in St. Eustatius and Saba to improve their adaptation to climate change by fighting against coastal erosion. It is thereby improving the ecosystem services, biodiversity and economic resilience of these Caribbean islands. [EU funding]
- Morocco Ghabati, Hayati: Training officials from the National Agency for Water and Forests on the forest sector's contribution to Morocco's Nationally Determined Contribution (NDC) to the Paris Agreement and on climate issues. [AFD funding]
- Latin America EUROCLIMA: Supporting the implementation of commitments and the structuring of a monitoring-evaluation system for the achievement of the objectives under the zero deforestation agreements of four industries in Colombia. [EU funding]

Expertise France is a public agency and the interministerial actor in international technical cooperation, subsidiary of the Agence française de développement Group (AFD Group). As the second largest agency in Europe, it designs and implements projects that sustainably strengthen public policies in developing and emerging countries. Governance, security, climate, health, education... It operates in key areas of development and contributes alongside its partners to the implementation of the Sustainable Development Goals (SDGs). For a world in common.

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