



Federal Ministry
of Food
and Agriculture



International Projects for Sustainable Forest Management

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Dear Readers,

The Earth is often called the “blue planet” – “blue-green” would be even more fitting. Because in addition to the oceans, forests are especially important ecosystems for our planet, covering around 30 percent of the Earth’s surface.

Forests store carbon, preserve species, and provide raw materials and income. They protect natural resources such as soil, water, and air. That makes them essential for our lives – and our survival.

But our planet’s forests are in danger. The climate crisis and deforestation, both legal and illegal, are shrinking the world’s forests at an alarming rate. Especially in the species-rich tropics, which are hugely important for the climate, this destruction is dramatic.

We must protect the world’s forests so they can protect us. That requires futureproof forest management that utilizes the forests’ many functions sustainably, protects them, and preserves them for future generations. The objective is to create forest ecosystems that are close to nature, species-rich and climate-stable. That requires a constant balancing of interests, because the worldwide pressure to use forest resources is immense.

Nationally, the German Ministry of Forestry has introduced long-term support for this with the funding program “Climate-Smart Forest Management,” also known as the Forest Climate Fund to finance additional climate protection and biodiversity services. A total of 900 million euros have been made available until 2026.



Internationally, the Federal Ministry of Food and Agriculture (BMEL) is financing projects to support the implementation of the proven principle “protection through use.” This is done jointly with partner countries and partner institutions – worldwide, bilaterally, and in collaboration with international organizations such as the Food and Agriculture Organization of the United Nations (FAO).

Publications, workshops, and follow-up projects will make the results available to the general public. Research partnerships, expert discussions, training, and continuing education will all help disseminate knowledge about meaningful long-term forest use.

This brochure illustrates the BMEL's international commitment to protecting forests and supporting sustainable forest management.

I hope you enjoy reading it!

Yours sincerely,

Cem Özdemir

Federal Minister of Food and Agriculture

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1 Introduction

Forests all around the world are vital for our planet – as important carbon reservoirs, as a habitat for countless animal and plant species, as a significant source of raw materials and income, and as a way to protect our essential natural resources such as soil, water, and air.

Sustainable, multi-functional forest management aims to support the forest, its many functions, and its productive capacity to protect future generations. Without sustainable management in this overarching sense, forests cannot be protected in the long term, since the worldwide pressure to utilize forest resources is very high. Among other things, this requires a constant balancing of interests.

Consequently, the Federal Ministry of Food and Agriculture (BMEL) finances international projects to help implement this proven principle in cooperation with partner countries and partner institutions worldwide.

The principle “protection through use” often forms the basis for these projects, which are frequently designed as pilot projects. Publications, workshops, and follow-up projects are used to share findings and results so that as many people as possible can benefit from them. Research partnerships, expert discussions, training, and continuing education also help disseminate this knowledge in order to ensure the meaningful, long-term use of forests worldwide.

The BMEL receives technical and administrative support for developing and implementing these projects from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, GFA Consulting Group GmbH, and the Federal Office for Agriculture and Food (BLE). As part of its bilateral cooperation program with selected partner countries, the BMEL also carries out joint projects in the areas of agriculture and the food industry.

2 Sustainable forest management

The concept of sustainable forest management facilitates forest use and preserves the multi-functional nature of forests.

Forests do not just provide us with the fundamental raw material of wood, which is needed worldwide to varying degrees for construction, cooking, and heating. They also make an essential contribution to climate protection, preserving biodiversity, and many other positive environmental impacts. Forests are also important for food, health, and recreation.

The different types of forests in different climate regions offer a variety of conditions and ways to use the forests. The concept and opportunities of sustainable forest management are currently being supported through the following projects:



View of typical Ukrainian Carpathian forests, where inventory plots have been established to collect data



→ **Ukraine:** The project aims to improve forest management based on reliable information about the forests.

To do so, it is supporting the planning and implementation of the first national forest inventory. Special focus areas are assuring the quality of the data and reporting of the results.

At the same time, the project is helping the Ukrainian State Agency for Forest Resources (SFRA) develop strategies to improve multi-functional forest management.

The project is ongoing despite the Russian war of aggression in Ukraine. The BMEL has provided additional funds, which alongside replacing destroyed equipment will be used to redesign the national forest inventory process. The use of remote sensing technology allows data to be obtained even for inaccessible forest regions.

Technical Support to Forest Policy Development and National Forest Inventory, Ukraine

Data is collected on site using mobile devices and specially developed software

→ **Brazil:** The Cerrado, like the Amazonian rainforest, is a significant ecoregion that is vitally important for climate protection and for preserving biodiversity. The tropical savanna extends across more than two million square kilometers (over 770,000 square miles).

That makes the Cerrado six times as the size of Germany. Due to the expansion of agriculture and the demand for grazing area, the region's natural vegetation is severely threatened.



Traditional silvopastoral system
near Poconé

To counterbalance the threat to the *Cerrado*, the profitability of autochthonous silvopastoral systems (SPS) – in other words, traditional pasture farming in forests – must be increased. Firstly, this involves quantifying the ecosystem services of the grazing systems and valorizing these services by means of labels and certifications, processing of non-wood forest products (e.g. animals, fruit, seeds, mushrooms, leaves), and carbon certificates.

This will help improve profitability of traditional grazing systems compared to other land uses.

In addition, the project provides further training for consultants and farmers in silvopastoral pasture farming, and helps train young German and Brazilian scientists. Furthermore, sustainable farming practices are being developed that will reduce further deforestation and land degradation in the Cerrado, which can then also be applied to other dry forest and savanna regions.



Improving sustainable management of the Brazilian Cerrado through quantifying and valorizing the ecosystem services of autochthonous silvopastoral systems – Brazil

Food and cosmetics products from domestic tree species, produced by a local cooperative in Pirenópolis

→ **South Africa:** Worldwide, community forests are an essential socioeconomic and cultural backbone for rural societies, which are facing major challenges due to climate change, poor living conditions, urbanization, and migration.

Since Nelson Mandela's election as President in 1994, community forests and their management have

played a special role in South Africa as a result of land redistribution among the Black population after apartheid. However, communities often lack knowledge about how to manage these forests sustainably and how to adapt to climate change. Consequently, the land is often leased to large forestry companies, which once again creates a dependency structure for the communities.



Community-owned land
in the Vhembe District (Limpopo)

The project *Forests4People* studies the adaptability of various types of community forests, their ecosystem services, and their significance for livelihoods in rural regions of South Africa. The objective is to strengthen the role of community forests in the *province of Limpopo*.

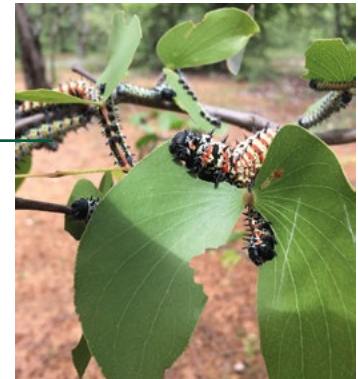
Along with gathering local knowledge from various community groups, the project will derive conclusions for multi-functional, sustainable forest management and improve the forestry-related and socioeconomic knowledge base.

The model-forest approach will help researchers acquire silvicultural expertise and share it with community members. In addition, the demonstration areas (known as martelosopes), in combination with a smartphone app, will serve as multi-year training sites for community members and destinations for student field trips, which will help improve forestry qualifications and training for multipliers.

In workshops, representatives of the various communities will have the opportunity to discuss possible solutions for community forest management with nongovernmental organizations (NGOs), state forestry authorities, scientists, and members of the private forestry sector. Moreover, periods of research in Germany and South Africa facilitate further networking and reciprocal exchanges of ideas among forestry scientists from both countries on an equal footing.

Development and implementation of multi-functional community forest management in South Africa. An opportunity for rural livelihoods in a changing climate – South Africa

Mopane worms are a source of protein for people in the communities





Harvesting bark
for medicinal purposes

The BMEL also promotes exchanges between forestry policymakers and forestry scientists through financial support for the European Forest Institute.

The institute regularly reports on projects, activities, and research findings in its “Resilience Blog.” It offers articles from different perspectives on risks to forests and forest management, and how they can be handled. Various authors report on how to integrate nature conservation into sustainable forest management, as well as improving the resilience of forests in order to maintain their many functions in the long term. Another topic is forests close to cities, which are good not only for our health, but also for recreation. www.resilience-blog.com

3 Capacity Development

Spreading knowledge and skills relating to sustainable forest management is an important building block in preserving the economic, social, and ecological value of forests for the good of current and future generations.

The following projects contribute to capacity development at a variety of levels, to transferring knowledge and educating men and women in the fields of politics, specialized institutions, and forestry professions.

→ **Vietnam:** The aim of the forest development strategy is the sustainable management of production forests. Implementing the strategy requires a great deal

of recognized training in the area of forestry. The Forest Training Center in Dong Ha was established by the Vietnamese Academy of Forestry Science (VAFS), with support from the BMEL, during the initial project phase. The center offers practice-oriented training. In the second phase, the project aims to further develop skills for applying forest management methods in state-run and smallholder forestry operations.



Training for the application of silvicultural techniques in acacia plantations



During the second project phase, in addition to consolidating the training offerings, the focus will be on achieving financial independence for the training center. To this end, the project will help the training center implement sustainable forest management techniques in its own demonstration areas.

Creating and implementing a professional business plan will help the training center attract orders and improve its financial independence.

Capacity development for applied forest management practices in Vietnam

Field exercises during a training session on IT-supported patrolling of protected areas

→ **China:** The objective of the project in *Shanxi Province* is to develop a concept for sustainable and multi-functional forest management. The forestry operation Zhong Cun serves as a demonstration site, and the resulting findings will help the partner organization Shanxi Forestry and Grassland Bureau (SFGB) anchor the guidelines for sustainable and multi-functional forest management in forestry ordinances and laws.

In the first project phase, the foundation for sustainable forest management was developed, including directives and guidelines. Planning, management, monitoring, and controlling for sustainable forest management are being systematically implemented using a forest database specifically developed for forestry operations and based on inventory data. Project activities also include continuing education for forestry personnel. In a subsequent phase, the planned forest management measures will be implemented with the help of experts. Reports on experiences and findings from the project will be made available for the further development of China's national forestry policy.

Supporting sustainable forest management by establishing a demonstration state-run forestry operation in Shanxi Province, China



Forest locations with high conservation value for which case-specific plans are required

→ **Zambia:** The project in the Eastern Province supports the dissemination of agroforestry management practices and aims to improve the acceptance of agroforestry – that is, the combination of trees and agricultural production in the same area.

Improved administration at the Farmer Training Center in the Katete District, along with better consulting offerings on the part of the agricultural consulting service for agroforestry, is creating a model training and consulting offering for agroforestry production methods in the region.

The project is making an important contribution by improving the rural population's income from agroforestry, reducing deforestation and forest degradation, and increasing the number of trees in smallholder farming operations. BMEL's partner for the project is the Zambian Ministry of Agriculture.

Supporting agroforestry for the production of wood and silvicultural non-wood products in Zambia– Phase 2



Nursery belonging to a group of farmers supported by the project in the district of Katete



Trainers learn more about planting trees

4 Research projects

Research and science findings can help people make decisions about the long-term restructuring of forests and their sustainable use, against the backdrop of climate change and increasing usage pressure.

The following projects and programs are contributing to further knowledge growth in these areas:

→ The comparison carried out in this project (*Argentina – Europe*) between Central European beech forests (*Fagus sylvatica*) and the “southern beech” forests of Central Patagonia (*Nothofagus spp.*) provides information about the sustainable management of temperate deciduous and mixed deciduous forests worldwide.

The trees’ adaptations to climate change and their responses to extreme events and disruptions are studied, and comparative analyses are performed to determine the vulnerability and resilience of the ecosystems. Researchers also consider the complex interactions between natural events, such as wild-fires, and the current, sometimes unsustainable, approach to forest usage.

Lenga forest (*Nothofagus pumilio*)
with golden Lily of the Incas (*Alstroemeria aurantiaca*)
in the undergrowth

The opportunities and risks of using non-native trees in these habitats are also evaluated and discussed.

The findings will be used to draw conclusions for a functional ecosystem and for preserving and restoring biodiversity. Another objective is to create recommendations for risk-minimized forest management and for restoring ecosystem services through appropriate forest renaturation.



The reference area in Central Patagonia to be studied in this project includes the water catchment area of the Río Puelo. The area in Central Europe (western Romania) was already studied during the previous project, NEMKLIM.

Sustainable forest management of temperate deciduous forests (northern-hemisphere beech and southern-hemisphere southern beech forests) – Argentina



Installing an iButton device to measure humidity and temperature in a Lenga forest (*Nothofagus pumilio*) in Patagonia

→ Productive, dignified employment is an essential prerequisite for reducing poverty, and therefore one of the objectives of sustainable development. Creating jobs provides new prospects and counteracts regional causes of migration and flight.

In rural areas, there is often a lack of employment opportunities, which contributes to migration of the rural population into the cities.

Against this background, the project *WoodForWork* analyzes the significance of the forest and lumber industry for income and employment in various regions of the world. To do so, the project carries out comprehensive literature and data research along with case studies and field surveys in four selected countries.

The overarching goal is to collect new, substantiated, and systematic information about employment in the forest and lumber industry in various economic regions of the world. On this basis, policy and investment recommendations will be created to improve the sector and the employment situation.

Studying the influence of political frameworks and the economic environment will highlight management methods that can contribute to increasing rural employment. New findings on the socioeconomic impact of forestry policies will support the development of suitable cluster funding programs for the partner countries of Vietnam, Ukraine, Kenya, and Ecuador.

A case study analysis of how the forestry sector contributes to the employment situation in various countries on Earth – Ukraine, Vietnam, Kenya, and Ecuador

The BMEL provides funds to support bilateral research cooperation and knowledge sharing for international, sustainable forest management. This will aid the global transformation of forest use to sustainable forest management. The goal is to counteract ongoing deforestation and forest degradation.

Each year, €2 million can be applied for under the funding guideline (FinW) for projects in the following two areas:

- promoting bilateral forestry research projects and
- promoting the international exchange of knowledge about forestry.

In the area of promoting bilateral research projects, research partnerships between a German research institution and at least one partner institution in a third country are funded to jointly research urgent forestry questions geared towards problem-solving or prevention in the area of sustainable forest management.

Regarding the international exchange of knowledge about forestry, the objective is to support the transfer of practice-based, specialized knowledge and experience as well as knowledge sharing among forestry experts. Among other things, that could include organizing meetings to initiate projects with international partners, supporting German forestry experts as instructors for training abroad, and organizing training in Germany with international participants from third countries.

The revised funding guideline dated May 27, 2021, established two deadlines a year to submit proposals in the area of funding for bilateral research projects. For the area of knowledge exchange, submissions can still be made year-round.

Find more information at:
www.ble.de/FinW



View of the mountains and forests of Shanxi Province, China

List of projects

	Implementing organization	Project title	Time frame
1	UNIQUE Land Use GmbH / Thünen-Institut	WoodForWork – Case study analysis of forestry sector contributions to the employment situation in Ecuador, Kenya, Vietnam, Ukraine	01/2020 – 08/2023
2	SFM Consultants	Reporting and assessment of biotic and abiotic forest damage in Europe (ECE region)	06/2020 – 12/2022
3	GIZ	Forest Policy Facility, China	11/2018 – 06/2023
4	European Forest Institute	New Ways for Forest Governance – NewGo!	11/2029 – 01/2023
5	European Forest Institute	Science supporting the Forest Europe process	01/2021 – 12/2024
6	Standing Working Group for Rural Development in the Western Balkans und Hessen-Forst	Support to a Regional Expert Working Group on Sustainable Forest Management (REAWG-SFM) in the Western Balkan Region	08/2022 – 12/2022
7	MekonEcology	Amsterdam Declarations Partnership: Monitoring and Transparency	10/2022 – 09/2025
8	Deutsche Forst Service GmbH and Hessen-Forst	Promoting of Sustainable Forest Management through the Establishment of a State Demonstration Forest Farm, Shanxi Province, China	01/2019 – 12/2022
9	Freiburg University / GISCON Systems GmbH	Adaptation of planning instruments used in Germany for a model region in China	01/2019 – 12/2023
10	Dresden University of Technology	Economic improvement of degraded tropical secondary forests through natural regeneration in Vietnam (OekAuNat)	12/2019 – 11/2023

	Implementing organization	Project title	Time frame
11	Dresden University of Technology / Institut für Holztechnologie Dresden gGmbH	Development of sustainable forest management and forest utilization concepts for aspen forest stands	01/2020 – 12/2024
12	University of Applied Forest Sciences Rottenburg	Sustainable forest systems for the future – Highly developed forest management in dialogue: Germany – Japan	01/2020 – 06/2023
13	Fairventures Worldwide FVW gGmbH / Borneo Orangutan Survival (BOS) Deutschland e.V.	Multi-functionality of mixed agroforestry systems in Kalimantan, Indonesia – Improving databases and approaches for sustainable biodiversity protection and rural development	05/2020 – 04/2023
14	AFC Agriculture and Finance Consultants GmbH / UNIQUE Land Use GmbH	German-Moroccan agricultural and forestry expert dialogue (DIAF) – Forest Planning and Control	06/2020 – 05/2023
15	UNIQUE Land Use GmbH / IAK	Technical Support to Forest Policy Development and National Forest Inventory	10/2021 – 09/2024
16	Freiburg University	Restoration of functional tropical landscapes through agroforestry systems: establishing a Biodiversity-Ecosystem-Function (BEF) experiment in the Bolivian Andes	10/2022 – 09/2024
17	Technical University of Munich (TUM)	Development and implementation of a multifunctional community forest management approach in South Africa. An chance for rural livelihoods in a changing climate	10/2022 – 09/2025

LIST OF PROJECTS

	Implementing organization	Project title	Time frame
18	Rhein-Waal University of Applied Sciences / Freiburg University	Improving the sustainable management of the Brazilian Cerrado through quantifying and valorising ecosystem services of autochthonous silvopastoral systems	11/2022 – 10/2025
19	Deutsche Forst Service GmbH and Hessen-Forst Consulting	Capacity development for applied forest management practices in Vietnam	04/2021 – 12/2023
20	UNIQUE Land Use GmbH	Supporting agroforestry for the production of wood and non-wood forestry products in the district of Katete, Eastern Province of Zambia	08/2021 – 08/2024
21	Freiburg University / UNIQUE	Adaptive forest management – Germany – Serbia: (ANKLIWA-DS)	11/2019 – 12/2023
22	HAWK Göttingen / University of Göttingen	Sustainable forest management of temperate deciduous forests – northern-hemisphere beech (<i>Fagus</i>) and southern-hemisphere (<i>Nothofagus</i>) beech forests	09/2021 – 08/2024
23	FAO	Forests for a sustainable future: educating children	04/2019 – 12/2023
24	Freiburg University	Continuing education for international forestry experts to improve carbon reservoirs in forest ecosystems (CBCF)	11/2018 – 03/2024
25	Deutscher Forstverein e. V.	“Forest Expert Program” to promote technical discussions of sustainable forest management at the international level	01/2020 – 12/2023

Abbreviations

BLE	Bundesanstalt für Landwirtschaft und Ernährung Federal Agency for Agriculture and Food
BMEL	Bundesministerium für Ernährung und Landwirtschaft Federal Ministry of Food and Agriculture
FAO	Food and Agriculture Organization of the United Nations
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
NGO	Non-governmental organization
SFGB	Shanxi Forestry and Grassland Bureau
SFRA	Ukrainian state agency for forest resources SPS
SPS	Silvopastoral system
VAFS	Vietnamese Academy of Forest Sciences

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