

Protecting the Last Cloud Forests of Ethiopia

**A project supporting the preservation of the wild coffee forests in Kafa
Zone, funded by the International Climate Initiative**

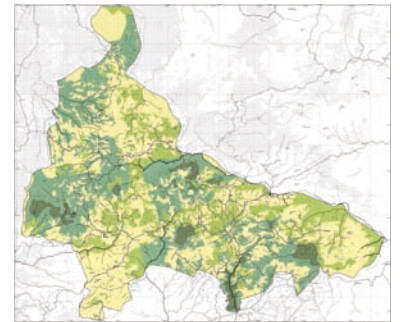




Conserving Ethiopia's Green Lungs

The deforestation of tropical forests is one of the main factors contributing to climate change. A few decades ago about 40 percent of Ethiopia was covered by forest; today less than 3 percent of these areas remain. One of the last remaining cloud forests of the country is located in the south-west, in Kafa Zone. These cloud forests are considered as the origin of wild coffee (*Coffea arabica*), an invaluable genetic resource.

NABU - The Nature and Biodiversity Conservation Union has been working towards the preservation of this exceptional natural heritage site through its project "Climate Protection and Preservation of Primary Forests – A Management Model using the Wild Coffee Forests in Ethiopia as an Example". The project is funded by the International Climate Initiative (ICI) from the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and incorporated into an agreement between NABU and the Ethiopian regional government Southern Nations, Nationalities and Peoples Regional State (SNNPR).



Extension of the Kafa Biosphere Reserve showing core, buffer and transition zone

Forest Loss and Climate Change

An Alarming Rate of Forest Decline

Ethiopia's last afro-montane cloud forests are a true paradise for species and belong to the world's 34 hotspots of biodiversity. Leopards, lions, hippopotamuses, buffalos and antelopes live in the forests that are almost always enveloped in clouds and fog. These forests are also home to many endemic species, species that are unique to this particular area.

The people living in the region are also dependent on the forests and use them in numerous ways. But cutting down the trees to collect firewood for example, or to clear land for farming and pastureland affects the entire ecosystem. The destruction of forests releases considerable amounts of carbon dioxide (CO₂) and the remaining forest can no longer store the same amount of carbon as previously.

Changes in climate and groundwater levels, as well as the resulting soil erosion and landslides, put even more pressure on local communities to clear further forested areas in order to gain new land for agriculture and grazing. If this continues, Ethiopia will have lost its remaining forests by 2020.



Climate Protection and the Preservation of the Cloud Forests



Introduction of the NABU Project

NABU's four-year project (2009 – 2013) focuses on forest and climate protection, providing support to the Kafa Biosphere Reserve and improving the livelihoods of the local communities. NABU relies on the knowledge and support of the local government of Kafa Zone and the BirdLife partner in Ethiopia, the Ethiopian Wildlife and Natural History Society (EWNHS) as well as international and local experts such as the Kafa Forest Coffee Farmers' Cooperative Union, which markets locally grown products from sustainable forest management.

An Integrative Approach against Forest Destruction and Climate Change

Preservation of Biodiversity

Destruction of forests is one of the main causes of climate change. Therefore NABU aims to conserve Ethiopia's afro-montane cloud forests by

- ▶ Carrying out forest and climate monitoring,
- ▶ Reforesting of deforested areas and enrichment planting of natural forest with native tree species (500 hectares),
- ▶ Raising awareness for forests and climate protection in local communities,
- ▶ Training 30 rangers for the protection and management of the Kafa Biosphere Reserve.

Introduction of Alternatives

In order to protect the cloud forests while at the same time addressing the needs of the local population, NABU plans to

- ▶ Plant 1,500 hectares of fast growing trees at community forests to ensure a long-term supply of firewood,
- ▶ Supply 10,000 energy saving stoves to local communities to halve the amount of firewood required per stove per year,
- ▶ Reforest 200 hectares with native crops and trees (agro-forestry) which provide additional food resources, stabilise the natural water supply and prevent soil erosion.

Prospects for the Future

Poverty in Ethiopia is one of the main driving factors causing the destruction of the afro-montane cloud forests, and therefore contributing towards climate change. In order to enhance the livelihoods of the local communities, NABU will

- ▶ Create new jobs, for example, in ecotourism by building a model lodge, an open-air museum, hiking paths and wildlife watching towers,
- ▶ Ensure that the forests serve as a long-term source of income by transferring user rights for 10,000 hectares of forest to the local people (PFM – Participatory Forest Management),
- ▶ Provide training and capacity building to the local communities to accompany the different project components.



NABU Project Office in Bonga

What has been accomplished so far

After having officially registered as a non-government organisation (NGO) in Ethiopia, NABU set up two project offices, one in Addis Ababa and one in Bonga. An Ethiopian project team of seven people has been employed. The project is managed from the NABU Headquarters in Berlin.

International experts started to carry out research in the area, the forests were surveyed and suitable sites for reforestation were selected. To reforest the area with native tree and crop species, seeds were collected in the project area and taken to tree nurseries where seedlings will be grown.

In addition, a concept for eco-tourism, one of the most important sources of income for the local communities in the future, has been developed. Based on this concept, the Kafa Biosphere Reserve provided with touristic infrastructure and an historical open-air museum, will become a travel destination for national and international tourists.

Rangers in Action – Protecting Forests and the Climate

Creating new job opportunities is an essential part of the project. A training programme for 30 rangers employed by the project goes hand-in-hand with the supportive work at the Kafa Biosphere Reserve. The rangers will offer guided tours, provide visitors and local people with information on nature conservation as well as forest and climate protection. They will also contribute to forest monitoring schemes, surveys on flora and fauna, oversee core areas and conduct awareness raising programmes in schools and communities.



Tree Nursery in Kafa



Sustainable Coffee Forest Management

As local communication and education are essential, NABU has started a teaching and training programme for young people to help them expand their own knowledge of climate and forest protection. They, in turn, can share this knowledge and raise the awareness of other members of their communities.

Project area

Kafa Biosphere Reserve

An Extraordinary Refuge

Ethiopia's afro-montane cloud forests in the south-west of Ethiopia are home to numerous animal and plant species, some of them endemic. They are also considered an important habitat for more than 300 bird species. In the past few years, NABU and its partners have worked towards the establishment of Kafa Biosphere Reserve in this region. In June 2010 UNESCO accepted the Kafa Biosphere Reserve, an area covering 760,000 hectares, into the World Network of Biosphere Reserves.



The black and white Colobus monkeys (*Colobus guereza*) live in small groups in the treetops. Local people fondly call them "monks" due to their appearance and regard them as the guardians of the forests.

Coffee shrubs start to blossom at the onset of the rainy season. Nine months later they have produced red coffee cherries which contain the seeds known as the coffee bean. In Kafa Biosphere Reserve the wild ripe coffee cherries are collected by hand in the forest.



Genetic Treasures

The region is considered to be the birthplace of Arabica coffee, one of the finest coffees in the world. It first grew here 1,000 of years ago and this is the only place in which it continues to grow wild in the forest. The coffee shrubs grow in the undergrowth of the cloud forests between an altitude of 1,400 and 1,900 meters and can reach a height of up to eight meters. Around 5,000 varieties grow wild in the forests – a tremendous range of genetic diversity with an estimated value of 1.4 billion US-Dollars.

An Irreplaceable Source of Life

The afro-montane cloud forests are known as Ethiopia's green lungs: they ensure rainfalls in the region, which feed rivers of nationwide importance. These forests are an important source of food and income for the local communities. Due to its immense amount of biomass, the forest can absorb 600,000 tons of CO₂ per year. Considered as an important carbon reservoir, the forest has a significant role in global climate protection.



For further information about Kafa Biosphere Reserve, please visit www.kafa-biosphere.com



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Images: Front cover: Forest: Bruno D'Amicis, Coffee Plant: NABU/Svane Bender-Kaphengst, Images composition: NABU/Katja Hauptlorenz

Inside left: Landscape: NABU/Svane Bender-Kaphengst, Wild Coffee: Bruno D'Amicis,

Map: NABU/Elisabeth Dresen, Clearing: Reiner Klingholz, Pasture: NABU/Svane Bender-Kaphengst

Double page inside: Forest Landscape: Bruno D'Amicis, Cloud Forest: Bruno D'Amicis,

NABU Project Office Bonga: NABU/Fanny Mundt, Tree Nursery: NABU/Svane Bender-Kaphengst, Sustainable Forest Management: Reiner Klingholz

Inside right: Cloud Forest in Background: Reiner Klingholz, Colobus Monkey: Bruno D'Amicis,

Coffee Blossom: Reiner Klingholz

Back cover: Parker's Reed Frog: Bruno D'Amicis, Bamboo: Bruno D'Amicis, African

Harrier Hawk: Bruno D'Amicis, Vervet Monkey: NABU/Svane Bender-Kaphengst