



# Conservation and sustainable use of the last wild coffee forests of Ethiopia



**A project for the preservation of biodiversity under climate change**



The deep forests of Kafa are home to a surprising speciality: Wild Arabica coffee grows there as natural part of the forest. Its bushes can reach a height of up to eight meters. Almost 5,000 coffee varieties form a living seed gene bank of extraordinary value.



The wildlife photojournalist Bruno D'Amicis managed to capture the first photograph of lions in a rainforest, while being on a mission for NABU in Kafa in 2012. Before this the African lion has been only documented outside of rainforests.



The largest ethnic group in Kafa are the Kafechos comprising also minority groups like Manjas. Their roots go back to the former Kafa Empire and beyond. Other ethnicities in the region include the Amharas and Oromos.

## The Project Region: Kafa Biosphere Reserve



### Global Importance

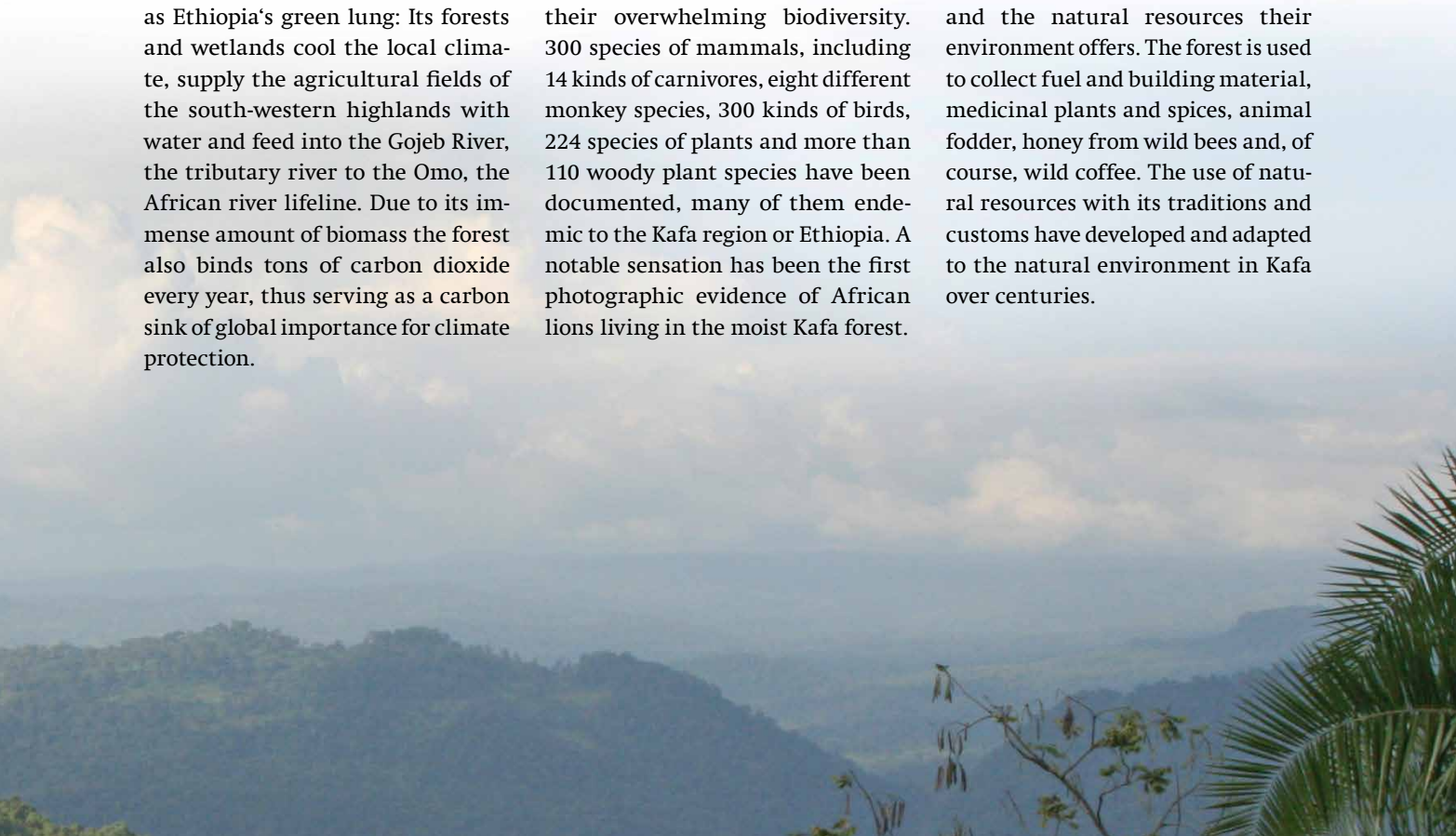
The Kafa Biosphere Reserve, extending over 760.000 hectares, is known as Ethiopia's green lung: Its forests and wetlands cool the local climate, supply the agricultural fields of the south-western highlands with water and feed into the Gojeb River, the tributary river to the Omo, the African river lifeline. Due to its immense amount of biomass the forest also binds tons of carbon dioxide every year, thus serving as a carbon sink of global importance for climate protection.

### Unique environment

The evergreen cloud forests in south-west Ethiopia are characterised by their overwhelming biodiversity. 300 species of mammals, including 14 kinds of carnivores, eight different monkey species, 300 kinds of birds, 224 species of plants and more than 110 woody plant species have been documented, many of them endemic to the Kafa region or Ethiopia. A notable sensation has been the first photographic evidence of African lions living in the moist Kafa forest.

### Special people

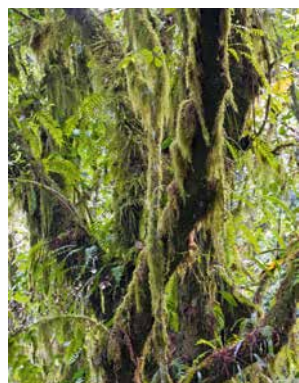
The people in Kafa mainly live from agriculture, the sale of wild coffee and the natural resources their environment offers. The forest is used to collect fuel and building material, medicinal plants and spices, animal fodder, honey from wild bees and, of course, wild coffee. The use of natural resources with its traditions and customs have developed and adapted to the natural environment in Kafa over centuries.



## Preserving biodiversity

Ethiopia is a world gene centre and one of the most biodiverse countries in the world. Its remaining natural forests are considered particularly valuable. One of these havens is the Kafa Biosphere Reserve in south-west Ethiopia. It is the centre of the genetic diversity of Arabica coffee, a habitat for various endangered animal and plant species and part of one of the world's 34 biodiversity hotspots. NABU has been working to preserve this unique region since 2009, supported by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The project 'Biodiversity under Climate Change: Community-Based Conservation, Management and Development Concepts for the Wild Coffee Forests' particularly focuses on the preservation of the rich diversity of species in the area. For its project work NABU closely cooperates with the Ethiopian regional government Southern Nations, Nationalities and Peoples Regional State, as well as many other partners.

## Biodiversity under climate change



## Slow destruction

The afro-montane cloud, rain and bamboo forests, the rich grasslands and the extensive wetlands and floodplains of the Kafa Biosphere Reserve are home to almost 300 bird species, as well as an equal diversity of mammal species such as monkeys, leopards, lions, hippopotamuses and buffalos.

The people in the region mainly live from subsistence farming, the sale of wild coffee and the natural resources of their environment. Customs and traditions have evolved over centuries, adapted to their natural environment. However, steady population growth, poverty, illegal immigration and agro-investment have led to an increasing pressure on the region's natural resources. At the same

time, the impacts of climate change are becoming more and more noticeable in the form of irregular rainfalls, extreme weather such as sudden, heavy rains or droughts, as well as the proliferation of pests. The wild Arabica coffee is proven to be especially sensitive to this change in climate conditions.

The destruction of natural forests not only has a massive impact on biodiversity, it also releases large amounts of carbon dioxide into the atmosphere. If the current deforestation rate is maintained at its present rate, all forest resources in Kafa will have been lost a hundred years from now.

# Innovative measures for tackling climate change and the loss of biodiversity

## Introduction to NABU's project

NABU's new project, which is planned to run for three years (2014 to 2017), will continue and expand former successful NABU programmes such as reforestation, participatory forest management and energy saving stoves. At the same time, new components will be introduced, protecting the unique biodiversity and strengthening community based management and regional development. The project merges climate and biodiversity preservation with regional development and the improvement of the people's living conditions. It particularly supports women as well as indigenous communities.



More than 30 experts from Ethiopia and Europe conducted team field work to assess the biodiversity of the Kafa Biosphere Reserve.

## Protecting threatened habitats

The forests and wetlands of the Kafa Biosphere Reserve are endangered by overuse, destruction and climate change. Therefore, NABU intends to

- restore 500 hectares of river and wetlands, to be used sustainably,
- reforest 500 hectares of fragmented forest, using native tree species,
- transfer the user rights for 4,500 hectares of forest to the local communities for participatory forest management,
- assess the biodiversity and develop conservation action plans with Ethiopian and German volunteering experts,
- establish a long-term monitoring system for forests, carbon sequestration and biodiversity in cooperation with both the rangers and the communities in the area.

## Conservation and development in harmony

To foster sustainable development at the Kafa Biosphere Reserve, the project will

- support and advise ecotourism initiatives for job creation and income for the local communities,
- develop regional natural products with women from the local community,
- train women in regional crafts such as pottery to breathe new life into this sector and supply them with an income,
- research and introduce alternative energy and fuel sources,
- improve energy saving stoves and distribute 2,500 prototypes to households,
- test at least five climate change resilient regional crop plants with farmers for increased food security.

## Learning for a sustainable future

The biodiversity of the region can only be preserved if people are inspired to protect their natural environment and feel integrated into the project. To ensure this,

- 10 rangers will permanently assist the project as communicators and multipliers,
- 250,000 people will be informed about biodiversity and its conservation,
- 150 teenagers will be trained as biodiversity campaigners,
- 20 nature camps for children will be piloted,
- spiritual leaders will be connected to promote the preservation of biodiversity,
- biodiversity modules will be developed with pupils and introduced in schools,
- the project will be accompanied by an information campaign to promote the project both nationally and internationally as model to be replicated in other regions.



Especially women are actively involved in the reforestation activities.



Frequent forest surveys as well as biodiversity monitoring with the local population contribute to effective conservation.

## Review: What has been accomplished so far

NABU and its partners have successfully campaigned for the region to become part of the worldwide network of UNESCO biosphere reserves. From 2009 to 2014 NABU implemented its first major forest and climate protection project in Kafa with the help of IKI. Almost 1,600 hectares of degraded forest and agricultural land were reforested and 10,000 hectares of natural forest was integrated into Participatory Forest Management (PFM). 11,200 energy saving stoves were distributed in local communities and a forest and climate monitoring was conducted.

After the development of a community-based tourism concept, infrastructure such as hiking trails with picnic huts, wildlife observation towers and camping sites has been set up. Rangers trained by the project are now

leading the forest monitoring, are offering guided tours to tourists and practical advice about nature and climate protection to local communities. Training programmes served hoteliers, service providers and nature guides. Small tourism projects and a community managed lodge were supported. A fundraising and marketing strategy, as well as a promotion package, was developed for the Kafa Biosphere Reserve and a forest fund for the preservation of rainforests was established.

An information campaign accompanying the project was launched to spread the word both nationally and internationally. The project has repeatedly been highlighted as a model project.



## Teaming up youth and elders

In Kafa the traditional form of society is gradually dissolving as the young people lose touch with the nature-orientated customs and traditions of their elders. Consequently, previous knowledge of the circle of life, the human connectivity to nature and the belief in natural spirits is being lost. Forests traditionally valued as sacred sites are no longer respected. To work against this development, spiritual leaders are offering outdoor camps for children and teenagers, where they can discover, marvel and discuss nature and traditions, and so keep old knowledge alive.



[www.kafa-biodiversity.com](http://www.kafa-biodiversity.com)



[www.en.NABU.de](http://www.en.NABU.de)



## Biodiversity under Climate Change: Community-Based Conservation, Management and Development Concepts for the Wild Coffee Forests

The project is part of the International Climate Initiative (IKI).  
The German Federal Ministry for the Environment, Nature  
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[www.international-climate-initiative.com/eng](http://www.international-climate-initiative.com/eng)

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