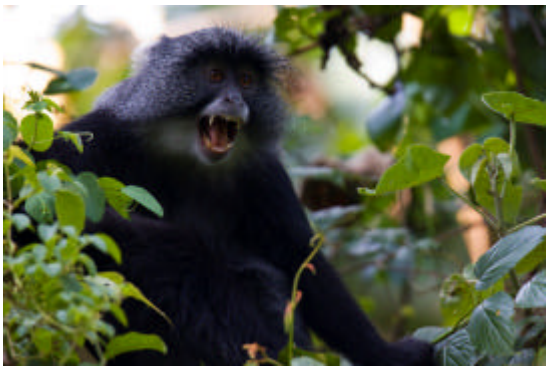
Saving Ethiopia's Wild Coffee Forests

By Ron Toft

Dense, wildlife-rich, mountain rainforests once covered huge swathes of south-west Ethiopia in a carpet of green. Today, only fragments of this priceless natural heritage remain.

Over the decades, these pristine forests - oases of incredible biodiversity where the world famous *arabica* coffee first grew thousands of years ago and still flourishes today - have progressively shrunk as more and more land has been cleared to make way for agriculture. A staggering 43 per cent have been lost during the past 10 years alone.

Now action is being taken on a number of fronts, not only to preserve what is left of the rainforests and restore degraded areas, but also to reduce carbon emissions and improve the livelihoods of local people through sustainable development. The Berlin-based Nature and Biodiversity Conservation Union (NABU) - German partner of the BirdLife International global alliance of conservation organisations working in more than 100 countries - has just embarked on a four-year, multi-faceted project within what is set to become the UNESCO-designated Kafa Coffee Biosphere Reserve.



At Kafa's marvellous wild coffee forests (pictures by Bruno D'Amicis)

A proposal for the designation of 760,144 hectares of land in the Kafa Zone as the Kafa Coffee Biosphere Reserve was submitted to UNESCO by the Ethiopian government towards the end of September 2009. "If approved, and we are very optimistic that it will be, this will be Ethiopia's very first biosphere reserve," said Svane Bender-Kaphengst, Head of NABU's Africa Programme[1]. "In fact, my organisation has a memorandum of understanding with the Ethiopian Ministry of Science and Technology for a network of biosphere reserves in the country. They are really positive about the concept. They see it as a good opportunity for Ethiopia to conserve what is left of the country's natural resources on the one hand and to combat poverty on the other. "The minister himself views the biosphere concept as a way of restoring degraded areas and restoring national pride in the country's natural and cultural heritage."

[1] Kafa Biosphere Reserve has been officially approved by UNESCO in June 2010

The key aim of NABU's four-year project within the reserve-designate is to protect what is left of the rainforests and ensure they are used in a sustainable way in future. Tropical deforestation is a major source of greenhouse gases. According to NABU's Kafa project paper, experts estimate that roughly 40 per cent of Ethiopia's total land area was forested as recently as 40 years ago. Today, only 2.7 per cent is forested. Without action, Ethiopia could be completely deforested by 2020.

The rainforests in south-west Ethiopia - afromontane cloud forests in official jargon - are home to all manner of flora and fauna, including many species found nowhere else on Earth. What makes the rainforests extra special is that they are where *Coffea arabica* originated. "It first grew here thousands of years ago," says an explanatory leaflet entitled *From the Rainforest to the Coffee Cup*, (published by a project involving NABU and partners) "and this is the only place in which it continues to grow wild in the forest. With its undreamt of biological diversity, this forest represents a genetic treasure house of enormous value for mankind." *Coffea arabica* is an evergreen plant that grows in the lower stories of the cloud forests at an altitude of between 1,400 and 2,000 metres. Wild coffee used to be considered an inferior product, but not any more. Some 6,500 small farmers, working in 26 cooperatives under the auspices of the Kafa Forest Coffee Farmers Cooperative Union, have secured a premium price for single-variety, single-source coffee as a result of improved production conditions and obtaining certified organic and fair trade status.

Before a public-private partnership was set up to help coffee farmers, no wild coffee at all was exported as being from a single site. Now up to 150 tonnes of such coffee are exported annually. What's more, the trade price for 1 lb or 456 grams of raw coffee has risen from 45 US cents to up to 160 US cents. The number of people benefiting from the export of wild coffee is currently around 55,000. Kafa's wild coffee beans have become "a flagship product for a country famed for its coffee production. The profit from this business has pushed up the value of the coffee forests to such an extent that it would make no sense for the farming families to cut them down and replace them with maize or millet fields."

Wild coffee before harvesting / Traditional coffee ceremony (pictures by NABU/ S. Bender-Kaphengst)

Because of Kafa people's dependence on wood for fuel and construction, and the clearing of once-forested areas for industrial agriculture, the biodiversity of the region is, according to NABU, being dramatically reduced. The key aim of the new NABU project, says Svane, is the "protection and sustainable use of the remaining cloud forests" in order to stop greenhouse gas emissions; boost carbon capture and storage through reforestation and rehabilitation of fragmented and degraded areas; improve the lives of local people through environmental and other benefits; and reduce their vulnerability to climate change. She explained that the destruction and degradation of the forests damages the fragile and finely balanced ecosystem by, for example, increasing the surface water run-off (which means less water is stored in the ground) and causing flooding, soil erosion, reduced water quality downstream and adverse changes in the local microclimate. The community's high dependence on

subsistence agriculture, such as ‘ensete' false bananas, coffee, maize and teff, forces them to clear further areas of forest, even if most of the current land use practices are sustainable.

"Also, the planned biosphere reserve area is part of the catchment area of three large rivers (Gojeb, Dinchia and Woshi) and an important source of water not only for the Kafa region but also for the bordering arid area to the south. Deforestation, therefore, also threatens the long-term water supply of the local population and even Ethiopia's hydro-water plants.
The NABU project seeks to cut greenhouse gas emissions by around 165,000 tons of C02 during the next four years and by 507,000 tons from 2009 to 2020. Five million seedlings of fast-growing and native tree species will be planted in an area of 1,500 hectares adjacent to villages to create a community forest that local communities can harvest on a sustainable basis for firewood. "This will have a knock-on benefit for women and children, who are the ones who have to collect firewood. Having what they need in one place means they won't have to spend as much time as they do now collecting the firewood. That, in turns, means more time for education." Another 10,000 hectares of forest will subject to what is called Participative Forest Management (PFM). In other words, local people will be granted long-term user rights for the sustainable use of the forest. "They will receive a legally binding certificate from the Ethiopian government for a period of 99 years. The forest will be managed by the community in such a way that all decisions regarding the harvesting of timber for construction and other purposes will be taken by the population as a whole for the good of the community."

The biosphere reserve area is already protected by legislation - a precondition for the UNESCO application. Within the reserve there will be 41,391 hectares of what are called core zones - mostly sacred sites already protected by the local people. "They proposed these as core zones." NABU will restore 500 hectares of degraded natural forest and 200 hectares of cultivated and other degraded land by planting native tree species. By the end of the project period, at least 10,000 wood-saving stoves will have been introduced into selected communities. "These stoves burn less wood and produce less smoke, which is good for nature and people's health," continued Svane.

Ecotourism is to be actively encouraged in at least five regions of the biosphere reserve. There will be wild coffee experience trails, observation towers for bird and other wildlife watchers, a network of hiking trails and access roads, an open-air museum, further education seminars, a model lodge and such like. A core group of 30 rangers will patrol the biosphere reserve and monitoring systems are to be installed to measure CO2 emissions and the condition of the forests. Local people will be trained to guide tourists and to explain to other local people the effects of climate change and agricultural practices. Living standards, says NABU, will improve significantly. "Communities will benefit directly from the creation of alternative sources of income, like tourism, from the establishment of the biosphere reserve," continued Svane. "The halt of deforestation will enable people to rely on the forest as a long term source of income and livelihood."

Funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) within the framework of the International Climate Protection Initiative, the NABU project will serve as a model for future international projects, combining climate and resources protection with sustainable local development. The project will be implemented in consultation and collaboration with local people as well as the local, regional and federal governments of Ethiopia. "The NABU project and the imminent announcement of the creation of the Kafa Coffee Biosphere Reserve together will make a very real difference both to the biodiversity of south-west Ethiopia and the lives of the people who live in the area," added Svane.

More information at www.nabu.de