



## **Forest Protection through Wood-saving Stoves - Project Success in Ethiopia**

With the International Climate Initiative (ICI), the Federal Ministry for the Environment (BMU) has supported climate protection projects in developing countries, newly industrialised countries and transition countries since 2008. This newsletter is published twice a year to report on news from NABU's ICI projects.

With its project "Climate Conservation and Preservation of Primary Forests – Management Model using the Wild Coffee Forests in Ethiopia as an Example" NABU, together with the Ethiopian government has been working towards the preservation and sustainable utilization of the remaining cloud forests in the 760,000 hectares large Kafa Biosphere Reserve in the South West of Ethiopia.



*Utilisation of energy-saving stoves*

As part of this project NABU introduced new, energy-saving stoves whose production and distribution has become a successful model: Of the planned 10,000 stoves, 4,000 have already been distributed to households with a high fuel wood consumption. The new technique of these so called MIRT-stoves not only reduces the amount of wood needed for cooking by

half, it also saves the forests, time for the user and produces less smoke and fire. The stoves are therefore a source of great relief to the people and the forest and have been received very well by the local population.

Together with the energy department of the local government, NABU trained 50 young unemployed men and women from different communities in stove production. In the meantime, these young people are established stove producers with a day's production of about 30 stoves - not only for households which have been chosen as beneficiaries as part of the project but also for their neighbours and friends, who have heard about the new technique and want to benefit from its advantages too.



*Production of the new stoves*

### **Ranger on duty for climate and forest protection**

Progress was also made in other project activities in Ethiopia: since April 2011, 30 rangers are supporting the Ethiopian NABU-team with the project implementation. The rangers assist with forest monitoring, supervise and manage the reforestation sites, patrol the core zones and raise awareness in the local communities for forest and climate protection. In cooperation with the Ethiopian Birdlife Partner “Ethiopian Wildlife and Natural History Society” (EWNHS) and the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ), NABU conducted the basic ranger training. The training not only included topics such as biodiversity and the importance of forests for the climate but also the supervision of tourist groups. The recently appointed rangers all originate from Kafa Biosphere Reserve and are wearing their new uniform and equipment with pride.



*Graduation from the ranger training*

### **Closing forest gaps**

Building on the results of the forest and community analysis for Kafa Biosphere Reserve, about 700 hectares fragmented natural forests are being reforested and 1,500 hectares of degraded or fallow fields are being replanted with fast growing tree species for fuel wood. They will serve the population as an alternative source of wood for the daily demand and therefore reduce the destruction of natural forests. Seedlings of indigenous tree species and fast growing tree species are currently grown in 17 tree nurseries throughout Kafa Biosphere Reserve. Half of the suitable areas for reforestation have already been identified in close consultation with the local communities; the planting has begun.

The transformation of 10,000 hectares of forest area into a sustainable forest management system (Participatory Forest Management/PFM) also contributes to the preservation of forest. Here, NABU is working closely with the local umbrella organisation for the wild coffee cooperatives as well as four additional experts employed for this task. Following consultations with local government and communities, four of the total 16 PFM areas have already been identified and individual management plans have been developed.



*Core and buffer zones in Kafa Biosphere Reserve*

### **Ecotourism instead of deforestation**

The concept for the establishment of ecotourism, one of the future sources of income for the local population, has been developed. Based on these plans, a network of hiking trails, wildlife and bird viewing towers, picnic sites, a model-lodge and a historical open air museum will be constructed throughout the next year. Accompanied by seminars and training events for tourism service providers, the goal is to create socially and environmentally friendly tourism in the area.

In order to measure the impacts on climate and forest protection of project activities such as reforestation and energy-saving stoves, experts of the University of Wageningen have started the climate and forest monitoring work at the end of 2010. They are analysing satellite photographs of the forest areas and evaluating the carbon storage capacity of the forests in regular intervals throughout the whole project period.

### Conservation of genetic treasures

The last cloud forests in the South-West of Ethiopia are home to numerous animal and plant species and are considered to be the origin of wild coffee (*Coffea arabica*), an invaluable genetic resource. The four year NABU-project (2009-2013) aims to serve internationally as a model-project in which climate and natural resources protection go hand in hand with sustainable regional development.

### NABU President visits “Harapan Rainforest”



*Olaf Tschimpke (NABU), Rudolf Specht (BMU) and Katjuscha Dörfel (NABU) with the Harapan project staff*

Since the end of 2009, the BMU’s International Climate Initiative has been supporting the “Harapan Rainforest” project with more than 7.5 million Euros via the *KfW Entwicklungsbank*. In a partnership with the British BirdLife-Partner Royal Society for the Protection of Birds (RSPB) and NABU, the Indonesian foundation Yayasan KEHI is working to restore destroyed habitats within Harapan as well as to effectively conserve this highly biodiverse forest in the long-term.

In July 2011, NABU President Olaf Tschimpke visited the project together with Dr. Rudolf Specht from the Federal Ministry for the Environment, representatives of the German Embassy in Jakarta, project stakeholders and sponsors from England and Singapore as well as representatives of the Indonesian government.

Apart from a festive reception and a joint tree-planting ceremony, the main focus was put on the assessment of the project activities.



*Visit to a project tree-nursery*

### Alternative sources of income

In his opening speech Olaf Tschimpke emphasized that it is essential for the success of the project to integrate the local communities and to offer long term alternatives. This is happening in Harapan: the project supports non-timber forest product business development and organization with the local communities. Also the German company AURO, a business cooperation partner of NABU, plans to investigate opportunities to gain dammar resin within the project area, which AURO would then purchase.

A key aspect of the project is the development of alternative sources of income for the long-time resident population. For example, up to now seventeen families have received training in bee-keeping with native stingless bees for honey production.

The tree nurseries of the project also provide an alternative source of income. By now, three project tree nurseries and four community plantations have been established. 75 indigenous families are involved in the nursery activities so far. They raise the seedlings, sell them to the project and are thus able to generate income – around 45,000 US-Dollars in the last four months. More than 80 percent of the employees of the Harapan team are from local communities. Five to ten staff members are indigenous Bathin Sembilan. All together the project has created about 230 “green jobs”.

### **Seedlings and ranger posts for the forest**

The tree nurseries were primarily established for the reforestation of the destroyed ecosystem in “Harapan Rainforest”. All existing tree nurseries together have a production capacity of up to three million seedlings a year. However, due to a very hot dry season only 60 hectares of forest could be reforested between July and September. For this purpose about 22,400 seedlings of 50 species were planted. With the start of the rainy season in October, the intensive planting season began. 200 hectares per month are planned to be restored. Overall, the aim is to increase the number of tree nurseries to ten sites and to reforest an area of 4,000-5,000 hectares within the ICI funding period.

Although “Harapan Rainforest” is under protection there are still incidences of illegal logging in the project area. Therefore one project measure is the construction of ranger posts, of which three have already been finished. Moreover, a microlight plane will be purchased for use of the Harapan team to monitor forest activities in the project area which covers almost 100,000 hectares.



*View over the project area from a ranger post*

### **A lighthouse in Indonesia**

“Harapan Rainforest” is the first project for so-called ecosystem restoration in Indonesia. As a pilot project it can be used as a model for 24 million hectares of tropical forests in Indonesia, which are currently neither actively managed nor protected. With around 1,000 square kilometres, Harapan is larger than Berlin and is home to a number of critically endangered

animals and plant species, such as the Sumatran tiger, the Asian elephant, the Malayan tapir as well as the Storm’s Stork, the rarest stork on earth.



*Storm’s Stork*

### **A buffer zone for Europe’s largest primeval mountain forest**

In December 2010, the BMU approved the first phase of NABU’s third ICI project. The objective of this four-year project is the conservation of Europe’s largest primeval mountain forest in the Western Caucasus World Natural Heritage Site. This will primarily be accomplished through sustainable forest management and reforestation in the buffer zone (approx. 80,000 hectares) planned around the World Heritage Site.

### **The initial project phase**

The successful conclusion of declarations of intent for cooperation is a crucial step in the first phase of the project. With these declarations, the governments of the federal district Krasnodar Krai and the Republic of Adygea confirm their support for the designation of the planned buffer zone in the northern part of the World Heritage Site. By means of round table negotiations, the signing of the declarations of intent is planned to be completed by the end of the year.

Already existing protected natural areas in the immediate vicinity will serve as a basis for the buffer zone designation. Therefore, all necessary data and documents concerning existent protected areas as well as data on administrative divisions of the relevant forestry districts were compiled.



*The Western Caucasus World Natural Heritage Site*

As part of the initial project phase three subcontracts are about to be completed:

- Experts of the GFA ENVEST GmbH (Hamburg) have developed the basic data for the quantification of the project's impact on climate protection.
- Experts of the local science centre "Kavkaz" (Krasnodar) were commissioned to analyse the current state of the forest, its species composition, historic rates of deforestation and degradation and their underlying causes.
- Experts of the federal governmental administration of the "Caucasian governmental Nature-Biosphere-Zapovednik Ch. G. Shaposhnikov" (Krasnodar), which administrates approximately 90 percent of the entire World Natural Heritage Site, developed an overall concept for the planned buffer zone. The concept provides a short description of the buffer zone including information on the future position and the division of the affected forestry districts within the buffer zone. Furthermore, general obligations for the protection and the management of the World Natural Heritage Site and the planned buffer zone are outlined. The buffer zone concept, as well as the results of the analysis of the forests' current state and the existing forestry plans will serve as a basis for a detailed management plan prescribed by the World Heritage Committee. The management plan is planned to be designed in the second project phase.

In December, preliminary project results will be presented to the governments of the federal district Krasnodar Krai and the Republic of Adygea as well as the forestry and conservation authorities at a conference in the project region. The conference will also include a discussion on the designation of the buffer zone and the forest and climate protection measures planned to be implemented in the second project phase.

### **A unique natural habitat**

The Western Caucasus World Natural Heritage Site is the only example in Europe of an extensive, high mountain landscape which has remained almost untouched by humans. For the long term protection of this ecosystem, NABU's ICI project greatly contributes to the conservation of its biodiversity, especially the remaining Nordmann fir forests. In addition, the region represents an important habitat for many endangered species such as lynx, wolf, brown bear and even endemic species such as the Caucasian bison. The World Heritage Site is thus one of the most important biodiversity hotspots in the world.



*Female brown bear with cubs*

### **Overview of the International Climate Initiative**

The International Climate Initiative of the Federal Ministry for the Environment (BMU) serves as a supplement to the German development cooperation with a clear focus on climate protection. In its fourth year, the ICI encompasses 256 projects in over 60 partner countries with financial commitments amounting to 556 million Euros. The projects are implemented in equal parts by *KfW Entwicklungsbank*, the *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)* as well as by NGOs. With 58 percent most ICI projects support the field of renewable energies. Approximately 28 percent of ICI funding is spent on projects which aim at the protection and sustainable use of natural carbon sinks such as forests and mires. 14 percent of the total ICI projects are currently dealing with measures for climate adaptation – a trend that is still increasing.



*Western Caucasus landscape*

NABU is represented in the International Advisory Board of the ICI by Thomas Tennhardt, Vice President and Head of the International Department. Next to national and international climate experts, the German Federal Minister for the Environment is also part of this advisory board. With its three projects funded by the ICI, NABU supports the conservation of forests with particularly high levels of biodiversity and is thereby contributing to climate protection and sustainable development.

These projects are part of the International Climate Initiative. The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety supports this initiative on the basis of a decision adopted by the German Bundestag.

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### **Contact**

NABU, Thomas Tennhardt,  
NABU Vice President and Head of the International Department  
E-Mail: [Thomas.Tennhardt@NABU.de](mailto:Thomas.Tennhardt@NABU.de)



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