



Conservation of Flagship Species Contributing to the preservation of our natural world heritage and improving human well-being

It is a silent process - unnoticed by many, the loss of biodiversity worldwide. Planet Earth is undergoing the worst wave of species' die-offs since the extinction of the dinosaurs. This time the cause for the extinctions of species is not an asteroid striking our planet or a cataclysmic volcanic eruption but the overexploitation of the planet's resources by mankind.

A rapidly growing human population resulting in an increased demand for land to serve as human living space, infrastructural development and agricultural production are some of the main drivers for the conversion of natural eco-systems into monocultures and ever-growing settlements. Poverty and poor governance and the resulting uncontrolled exploitation of natural resources through poaching, illegal wildlife trade, logging or

mining further aggravate the problem. As a result of this detrimental development we see the loss of habitats for some of the globally most endangered flora and fauna. The irreversible degradation of natural resources – with species extinction being an indicator of this – directly and adversely affects our livelihoods.

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Dear reader!



Catherine Güttner,
Editor

In this edition of All About AHT GROUP we present a topic that is not only of importance for experts in the fields of development cooperation but also for our society as a whole. The irreversible degradation of natural resources, the loss of biodiversity and the extinction of species have a direct impact on our livelihoods, our climate and our well-being. The importance of the conservation of so-called 'flagship species' has been recognised by international conservation and donor organizations. At present, many environmental NGOs focus their conservation measures on these species in a number of biodiversity hotspots worldwide.

These efforts are not only being supported through public donations, but also through increasing support from development cooperation institutions. The German Government has substantially increased its funding commitments for biodiversity conservation and climate change mitigation and adaptation projects through the International Climate Initiative (IKI) supported by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and also through the German Federal Ministry for Economic Cooperation and Development (BMZ). Corresponding to the upsurge in funding for nature conservation, increased efforts are going into the creation of, and support to, environmental foundations, trust and basket funds, which are supported by the international donor community. As a consequence, the portfolio of AHT in nature conservation and protected area management has grown significantly. AHT is currently implementing

projects in this field in some of the world's most endangered ecosystems in both Asia and Africa.

We consider it a great privilege to contribute to the conservation of some of the world's most endangered species and we intend to continue to do so!

We hope you enjoy our newsletter. We wish you a peaceful and happy year 2016!

The Russian Company Orlovka AIC of the AHT Group practices a sustainable farming approach where the production activities and the sustainable use of the natural resources of its farmland and its surroundings are managed as an integral part of the different biospheres within the Amanak watershed. The sustainable management of the area has led to an increase in the appearance of wildlife such as beavers, moose and black grouse.



The AHT Department for Nature Conservation, Forestry and Agriculture – based at our headquarters in Essen, Germany - employs about a dozen specialists with backgrounds in biology, geography, agriculture, regional science, political and social science who deal with the multiple aspects of the work described in this newsletter.

New contracts recently acquired by AHT:

Mali: Smallholder Irrigation in the Inland Delta – Iprodi III (KfW) +++ **Morocco:** IWRM Study Chichaoua (KfW) +++ **Indonesia:** Emission Reduction in Cities Programme: Solid Waste Management – Accompanying Measures (KfW) +++ **Indonesia:** Ecosystem Restoration Concession (ERC) for Bukit Tigapuluh, Sumatra (KfW) +++ **Niger:** Kandadji Project: Evaluation of Large Scale Resettlement for Transboundary Water Infrastructure (WB) +++ **Caucasus:** Transboundary Joint Secretariat (TJS) – Promoting Cooperation in Nature Conservation, Phase 3 (KfW) +++ **Tunisia:** IWRM Public Irrigation Schemes Mornag – Groundwater Recharge (KfW) +++ **Tunisia:** IWRM Public Irrigation Schemes Mornag – Engineering Component (KfW) +++ **Tunisia:** IWRM Public Irrigation Schemes Mornag – Accompanying Measures (KfW) +++ **Togo:** Programme for Technical and Vocational Education and Employment for Young People (KfW) +++ **South Africa:** Violence Protection through Urban Upgrading (VPUU) Western Cape (KfW) +++ **Tunisia:** Modernisation of Public Irrigation Schemes Chouigui – Feasibility Study (KfW) +++ **Tunisia:** Modernisation of Public Irrigation Schemes Chouigui – Engineering Component (KfW) +++ **Tunisia:** Modernisation of Public Irrigation Schemes Chouigui – Accompanying Measures (KfW) +++ **Tunisia:** IWRM: Calibration of Water Evaluation and Planning (WEAP) Tool (GIZ) +++ **Ethiopia:** Soil Conservation Baseline Study (GIZ) +++ **Tunisia:** Feasibility Study on Water Transfer from Northern to Central Tunisia (KfW) +++ **Indonesia:** Ecosystem Restoration Concession (ERC) for Gorontalo, Sulawesi (KfW) +++ **Indonesia:** Forest Programme II: Biodiversity Conservation and Watershed Management Sumatra (KfW) +++ **Madagascar:** PDCID: Communal Development and Decentralisation Programme (KfW) +++ **Kenya:** Smallholder Irrigation Programme Mount Kenya IV (KfW) +++

Conservation of Flagship Species (contd.)



Jörg Lieberei,
 Head of Nature
 Conservation,
 Forestry and Agriculture

The impact of the extinction of a specific species on the corresponding ecosystem varies and can have more or less important consequences. However, certain species can be regarded as being of particular importance, for example the orangutan or the Sumatran tiger. The presence of the Sumatran tiger – which requires a large, relatively undisturbed habitat – indicates that the natural ecosystem is still relatively intact. Hence, the tiger is particularly valuable as an indicator for the overall condition of the environment. This is one of the reasons why the Sumatran tiger has been defined as one of 14 so-called flagship species, targeted as a priority for conservation efforts by the Indonesian Government. The selection of flagship species is not only based on the biological connotation, but also on strategic and marketing aspects which can be associated with a certain species. Therefore, flagship species are often those which have the potential to attract attention and the sympathy of the public and in consequence induce people to support conservation or to donate funds. Flagship species can also be important icons of a region, which in turn can foster the pride and support of the local population.

Some may argue that the extinction of a limited number of species is a tolerable price to pay, in exchange for the development of mankind. However, continued environmental degradation and deforestation of forest ecosystems significantly contributes to greenhouse gas emissions and a change in global climate. Therefore, we need to search for ways to protect remaining forests.

In this context, we in Central Europe should not forget that we had largely destroyed our primary temperate forests in medieval times and that we had eradicated some of our most spectacular mammal predators such as wolves and bears. However, in the following centuries of industrialization and economic development we recognized the need for our forests and we have managed to rehabilitate them to a certain extent and even to reintroduce large predators by the end of the 20th century. Today, German forests are managed sustainably and provide both environmental services and income generation opportunities.

Fortunately, nature conservation in most countries today has moved away from old “fence and fine” approaches, embracing more inclusive and participatory concepts. It has been recognised that protecting nature inside protected areas only does not suffice. Appropriate zoning is required inside protected areas and participatory land use planning is needed around them. Buffer zones need to be developed around protected areas, which are then used in a sustainable way benefiting both the local population and nature. At the end of the day, nature conservation can only work if the local population sees it as bringing them and their families tangible benefit.

Key to achieving this is good governance. Most government institutions in the nature conservation sector are looking for new ways to improve the management of natural resources, for example through decentralising responsibilities to the lowest appropriate administrative level. National policies are being improved in a way to include local communities in the co-management of natural resources and in order to grant access and land rights to the local population. In this context, local and international NGOs have a key role to play. AHT has been working for and collaborating with many of the larger and well known international conservation NGOs in particular with Worldwide Fund for Nature (WWF), Frankfurter Zoological Society (FZS), Naturschutzbund Deutschland (NABU), Wildlife Conservation Society (WCS) and Fauna Flora International (FFI).

AHT has been supporting government institutions with the implementation of integrated conservation projects in and around national parks worldwide. Our main expertise lies in the improvement of livelihoods and the socio-economic development of park-adjacent communities for instance through community forestry, agroforestry, eco-tourism development and other community development measures. We support protected areas through the development of park management plans, biodiversity monitoring, the construction of park infrastructure and the procurement of equipment. AHT also provides advice on the financing of nature conservation and the development of monitoring systems. In addition to local and national nature conservation efforts, AHT works on eco-regional transboundary conservation. This also aims at the mitigation of conflicts and contributes to building and maintaining peace. Our nature conservation activities currently focus on three main regions and biodiversity hotspots, namely South-East Asia, the Caucasus and the Congo Basin.



The critically endangered species Bali starling (*Leucopsar rothschildi*), one of Indonesia's flagship species

On the following pages we present a selection of our work in the field of nature conservation.

Ecosystem Restoration in Sumatra, Indonesia



Paul Kimman,
Chief Technical Adviser

The Bukit Tigapuluh Landscape straddles the Jambi and Riau provinces in Sumatra and comprises about 500,000 ha of dry lowland and mountain forests in a few major unfragmented blocks of forest. Of these forests, only those in the 144,000 ha

large Bukit Tigapuluh National Park are protected. The forests, inside and outside of the National Park, are famous for their incredibly rich biodiversity and are home to some of Indonesia's most enigmatic flagship species – the Sumatran tiger, the Sumatran elephant and the Sumatran orang-utan.

In order to safeguard forests and wildlife outside of the Park, WWF and the Frankfurter Zoological Society (FZS) have established an enterprise which has obtained a 60 - year Ecosystem Restoration Concession (ERC) license from the Ministry of Environment and Forestry for an area of 40,000 ha adjacent to the National Park. This effectively enlarges the forest area where tigers, elephants and orang-utans can roam freely. WWF and FZS will manage this area in partnership with local forest dependent communities, and through effective coordination and

collaboration with a range of government and non-government stakeholders.

AHT has concluded a five year contract in July 2015 as Technical Assistant Consultant to WWF and FZS for specific aspects e.g. the forest restoration strategy, community involvement mechanisms, conflict resolution strategies and monitoring. The project is co-financed by the International Climate

Initiative of the German Federal Ministry for the Environment (BMUB) through KfW Development Bank.

Find out more about this initiative here:
<https://fzs.org/de/projekte/aktuelle-projekte/bukit-tigapuluh>
www.wwf.de/2015/juli/tigerwald-statt-akazienplantage



Sumatran orang-utan (*Pongo Abellii*) at jungle school before its reintroduction to the wild near Bukit Tigapuluh National Park

© FZS - Mira Margaretha

Tiger and Forest Conservation in Indonesia

The Kerinci Seblat National Park (KSNP) together with Bukit Barisan Selatan and Gunung Leuser National Parks, make up the UNESCO World Heritage Site known as 'Tropical Rainforest Heritage of Sumatra' representing the three most important blocks of forest on Suma-

tra for the conservation of the biodiversity of both lowland and mountain forests. KSNP is the most important habitat for the severely threatened Sumatran tiger, the last surviving of Indonesia's three tiger species. Today the remaining population of the Sumatran tiger, which only occurs on Sumatra Island, is estimated at a total of approximately 450 individuals.

From early 2016 on, AHT will begin the implementation of Forest Programme II, a large new biodiversity conservation and watershed management project in Indonesia. The project will focus on supporting the management of Kerinci Seblat National Park and the improvement and rehabilitation of the upper and middle sections of the Merangin sub-watershed of the Batanghari River in the province of Jambi, Sumatra. Protection measures and rehabilitation of forests and forest lands will be implemented in communes bordering the National Park. The executive agency of the project is the Indonesian Ministry of Environment and Forests. Important partners on the ground will include forest edge communities and NGOs such as Fauna Flora International (FFI) who foster tiger conservation and the improvement of livelihoods in the area. The programme is scheduled for seven years and is co-financed by the German Development Cooperation (BMZ) through KfW Development Bank.

Jörg Lieberei



Sumatran tiger (*Panthera tigris sumatrae*). Biodiversity monitoring with a camera trap of the Tiger Protection and Conservation Unit (TPCU) of the Kerinci Seblat National Park

© FFI/Panthera/KSNP, courtesy of Debbie Martyr

Wallacea - Conservation of Endemic Species in Sulawesi, Indonesia

Sulawesi boasts unique biodiversity. This is due to the island's location in the Wallacea, a biogeographic area and transition zone between Asia and Australia, named after the famous British Naturalist Sir Alfred Russel Wallace. Almost all Sulawesi mammals are endemic. Famous examples are the babirusa, the anoa and the tarsier.

As in many other tropical regions that hold the last great splendors of forests and biodiversity, the threats to these forests and wildlife are increasing. This moved NABU (Naturschutzbund Deutschland) and the NGO Burung Indonesia to team up to help protect the Popayato-Paguat forest landscape in Gorontalo province of Sulawesi, raising local and regional awareness as well as bringing about support and action for the sustainable management and conservation of the landscape's forests, biodiversity and environment. This also involves working with the 16

villages in the area. The majority of the villagers depend on farming, livestock and cash crops for their livelihood. Still, poverty levels are relatively high. Forest ecosystem management that also brings livelihood opportunities is therefore essential. NABU and Burung Indonesia will develop such an approach based on a 60-year licensed Ecosystem Restoration Concession (ERC) covering an area of 50,000 ha.

AHT has just started providing technical assistance to NABU and Burung Indonesia. The project is co-financed by the International Climate Initiative of the German Federal Ministry for the Environment (BMUB) through KfW Development Bank and is planned for a period of up to five years.

Paul Kimman



Sulawesi tarsier (Tarsius spectrum)

Preserving the Unique Biodiversity of the Central Annamites of Vietnam

The Annamites Range, the 1,100 km majestic mountain chain running north-south down the spine of Vietnam and Laos, is the home of the Phong Nha-Ke Bang National Park, at 123,000 ha Vietnam's largest protected area. The Park is the core of a veritable World Heritage wilderness complex, one of the last in Southeast Asia, known for its outstanding value in terms of universal geomorphology, ecology, and biodiversity.

Since 2008, a team of AHT experts has been providing technical advice to the Provincial People's Committee of Quang Binh to improve the management of the Park and reduce



A pensive Red-shanked douc langur in the temporary holding cage of the Park's semi-wild enclosure, waiting for his release back in to the wild

pressure on its natural resources. The Park is home to nine of Vietnam's eleven primate species. With support of the Frankfurter Zoological Society (FZS), Cologne Zoo (CZ), and the project, the Park has set up and operates an animal rescue centre with an eight hectare semiwild enclosure where confiscated primates are prepared for reintroduction into the wild.

The Phong Nha-Ke Bang National Park Region Project is co-financed by the German Development Cooperation (BMZ) through KfW Development Bank

Bas van Helvoort

The Last of its Kind? The Sumatran Rhinoceros



*Bas van Helvoort,
Chief Technical Adviser*

A mere 200 years after its discovery by western science, the smallest and most distinct of the world's five rhino species may be wiped off the face of the planet. The Sumatran rhinoceros is the most critically threatened rhino species. Once roaming from Myanmar to Malaysia, Borneo and Sumatra, their numbers are now down to less than 100 in three national parks on the Indonesian island of Sumatra.

WWF, the Wildlife Conservation Society (WCS) and the Indonesia Rhino Foundation (YABI) joined forces and developed a project concept for the International Climate Initiative of the Federal German Ministry for Environment (BMUB) financed through KfW Development Bank

to address the situation in the Bukit Barisan Selatan National Park.

AHT participated in a feasibility study commissioned by the NGOs in May 2015. Building on experience in Africa, the study recommended the establishment of an Intensive Protection Zone (IPZ) in an intact area in the Park, with heightened patrol efforts to bring about zero-tolerance for poaching. Furthermore, isolated animals should be added to the IPZ population where rhino reproduction is to be intensively managed in semi-wild circumstances. Pressure on the IPZ will be reduced through the restoration of encroached zones and improved land use management in villages around the Park.

Conservation of Fauna and Sustainable Management of Protected Areas in Cameroon



Blandine Schaffner,
Project Manager

The Forest and Environmental Sector Programme of Cameroon (PSFE) implements Cameroon's national strategy for sustainable and participatory management of forest resources. An important instrument of this national programme is the *Fonds Commun*, a basket fund with significant support from the German Development Cooperation (BMZ) and with financing through KfW Development Bank. Since 2010, a team of AHT experts supports the programming, implementation and monitoring of measures financed via the *Fonds Commun*. Important pillars of the activities being financed are the

conservation of fauna and the sustainable management of protected areas in the country.

The security situation has deteriorated in some areas of Cameroon and in the region at large due to the activities of rebel groups in recent years. Limited means of control in unsafe and remote areas have led to a sharp increase in poaching and the illegal trade of wildlife. This has resulted in one of the worst massacres of elephants in history in 2012 with more than 200 animals being slaughtered in Bouba Ndjida in a

space of a few months. To counter these trends, the *Fonds Commun* is strengthening the management of Bouba Ndjida National Park as well as Benoué, Waza and Korup National Parks while investing in urgently required infrastructure and equipment.



Elephant (*Loxodonta africana*) in Bouba Ndjida National Park, Cameroon

Legends of Nature in the Southern Caucasus



Servi Nabuurs,
Chief Technical Adviser

The nature of the Southern Caucasus is breath-taking and biodiversity is extremely high due to its geographic location on the crossroads of continents, different altitudes and different climate zones. The protected areas are home to flagship species such as the Caucasian leopard, bear, lynx, chamois, tur, bezoar, mouflon and gazelle, but also many migratory and indigenous birds.

The Transboundary Joint Secretariat in the Southern Caucasus (TJS) is co-financed by the German Federal Ministry for Economic Development and Cooperation (BMZ)

through KfW Development Bank. TJS assists in further developing and improving the implementation status of the Ecoregional Conservation Plan that pursues biodiversity protection in harmony with local economic development. AHT implemented the 2nd phase of TJS (2011 – 2015) and has now started implementing TJS phase 3 (2015 – 2019) with WWF Caucasus Programme Office as the executive agency. AHT is currently focusing on the promotion of eco-tourism develop-

ment in and around protected areas, appropriate socio-economic development approaches for communities adjacent to protected areas and financing cross border cooperation and field programmes between Georgia, Armenia and Azerbaijan, for instance for the reintroduction of important species like red deer and gazelles.

Find out more about TJS here:

<http://tjs-caucasus.org>

<http://legendsofnature.org>



Goitered gazelles (*Gazella subgutturosa*) in Shirvan National Park, Azerbaijan

Rainforest Protection in the Congo Basin



Forest elephants (*Loxodonta cyclotis*) in Dzanga Sangha Protected Area in the Central African Republic

The Sangha Tri-National Trust Fund (STNF) is a basket fund for the fostering of nature conservation in the Central African Region, which aims to contribute to the long-term financing of conservation, eco-development and cross-border cooperation within the forest complex called the Sangha Tri-National (TNS). This forest complex comprises Lobéké National Park in Cameroon, Dzanga Sangha Protected Areas in the Central African Republic and Nouabalé Ndoki National Park in the Republic of Congo as well as adjacent areas around the parks.

AHT is providing institutional and operational support to STNF. Our services include the planning, implementation, monitoring and updating of work plans and budgets of the foundation and the monitoring of subsidies as well as the harmonisation of management tools for STN parks. The support to STNF is co-financed by the German Development Cooperation (BMZ) through KfW Development Bank.

Jörg Lieberei

News from the Russian Companies of the AHT Group

Nature Conservation and Agricultural Production as practiced by Orlovka AIC

Orlovka AIC's production philosophy is the sustainable use of the natural resources of its farmland and its surroundings. The production process should form an integral part of the different biospheres within the Amnakh watershed.

The no-till farming approach leaves crop residues and harvest losses on the fields during autumn and winter. In the spring, seeds are directly drilled into the residue, without any soil preparation. This production system not only reduces erosion, improves the humus content of the soil and water availability for crops, but also provides shelter and food for wildlife, which has increased remarkably in recent years. The many foxes and birds of prey keep the rodent population under control. Manmade reservoirs, beaver dams and many springs regulate the flow of the streams in the area. Even during the driest periods of the year, a part of the steady flow can be used for irrigation purposes.



Black grouse...



... foraging on a harvested soybean field in the Murakla valley

Moose, siberian roe deer, wild boar, hare, suslik, marmot, beaver, fox, black grouse, hazel grouse and partridges are regularly sighted during visits through the Orlovka fields.

The abundance of wild life nonetheless comes at an agricultural cost. Wild boars love corn fields, with up to 30% of the crop being destroyed along some stretches this year. Moose and roe deer like to feed on the tops of soybean plants, hindering their full development. Near the forests, the crop is maintained at a height of 70 cm, which seems to be a comfortable feeding height for moose. The total damage caused by wildlife is however estimated at only one to two percent of the harvest.



Moose



Beaver...



...at work near an Orlovka cornfield in the Morava valley



Young foxes waiting for "leftovers" on the road side

Harvest 2015

The weather during the harvesting months August, September and October was perfect this year. 1.500 tons of oil crops and 3.800 tons of grains were harvested - an increase of 55% compared to 2014. The potato harvest of 4.000 tons was the same quantity as 2014, but of a much

higher quality and with a higher fraction of seed potatoes. The main reason for the stagnation was the lack of adequate planting material in the springtime and the focus on the production of high quality seed potatoes, for which potatoes have to be kept small, reducing the yield per ha.

The total area of Orlovka AIC amounts to 4.500 ha these days. The arable area of Orlovka AIC increased to 3.600 ha in 2015, as a result of the re-cultivation of 700 ha of newly acquired land.

Unmanned Aerial Vehicles – Cost Efficient Tools for Spatial Data Acquisition



AHT's new Unmanned Aerial Vehicle (UAV) equipped with an optical sensor (digital camera), a video camera, an autopilot system and a GPS navigation system during a test flight over a fallow near Essen. With the termination of the testing phase AHT is ready to deploy its

UAV upon request in ongoing or new projects. Potential fields of applications comprise amongst others: forest cover monitoring, wildlife and biodiversity monitoring, land use mapping, mapping of irrigation schemes, assessment of crop production etc.

IMPRESSUM

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