Biodiversity in German Development Cooperation

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2010 International Year of Biodiversity

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Federal Ministry for
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Concerned by the continued loss of biological diversity, the United Nations General Assembly declared 2010 the International Year of Biodiversity. The year coincides with the target adopted by governments in 2002, to achieve, by 2010, a significant reduction in the rate of biodiversity loss.

Acronyms

ABS	Access and benefit-sharing
BMU	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BMZ	Ministry for Economic Cooperation and Development
CBD	Convention on Biological Diversity
CEPA	Communication, Education and Public Awareness
CIM	Centre for International Migration and Development
COP	Conference of the Parties
DED	German Development Service
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FC	Financial Cooperation
FCPF	Forest Carbon Partnership Facility
FIT	Funds-in-Trust
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH
GEF	Global Environment Facility
ICZM	Integrated Coastal Zone Management
IUCN	World Conservation Union
KfW	Kreditanstalt für Wiederaufbau (KfW Development Bank)
MDG	Millennium Development Goal
NBSAP	National Biodiversity Strategy and Action Plan
ODA	Official Development Assistance
PES	Payment for Environmental Services
PIC	Prior informed consent
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCBD	Secretariat of the Convention on Biological Diversity
SEA	Strategic Environmental Assessment
TC	Technical Cooperation
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNCCD	United Nations Convention to Combat Desertfication
WWF	World Wide Fund for Nature

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Preface

No one is an island: everyone and everything is interdependent. This is true of both social networks and stable economic environments. Our dependence on services provided by the natural environment is at least as important, but receives far less attention and financial support. As a consequence, intact ecosystems are in places being overused and destroyed, which causes loss of biodiversity and of important environmental services.

There are plenty of examples of the benefits of nature: the world's forests are not only used for recreation but also perform valuable ecological and economic services, supplying us with clean drinking water, clean air, building materials and food. What is more, they are among the most effective forms of climate protection. Biodiversity is also vital to human health. About 10 of the 25 most important pharmaceuticals in the world are derived from wild species.

For thousands of years, inventors have looked to nature for inspiration. This is also true of bionics – a new branch of research that increasingly copies the systems found in nature to develop technologies used in robotics, the construction industry, design, transport, communications and energy efficiency. However, in many cases the human versions are a long way from achieving the efficiency of the originals found in nature.

Biodiversity is by no means a specialist subject reserved for nature lovers and environmentalists. The United Nations therefore declared 2010 the International Year of Biodiversity. Alongside climate change, the conservation and sustainable use of nature and its precious resources are among the central global challenges of our time. Our livelihoods – and indeed life itself – depend on intact ecosystems and the environmental services they provide. In the context of sustainability, they also provide adaptation and development options for future generations.

We human beings are both part of biodiversity and dependent on it – both in industrialised and developing countries. However, the majority of sensitive ecosystems and up to 90 % of all known species of flora and fauna are in the countries of the South. There people's livelihoods often depend directly on natural resources. Fertile soil, clean rivers and lakes, forests and medicinal plants are vital to the survival of billions of people.

However, our resource-intensive activities have drastically altered virtually all the Earth's ecosystems. For the last 50 years, biodiversity has been declining 100 to 1000 times faster than before, causing as yet incalculable damage to the world economy and to human development. In developing countries, poverty often forces people to overuse nature's scarce resources.

The German Government has recognised the importance of biodiversity and the necessity to take action on a global scale. In recent years, funding in the form of long-term pledges to partner countries has risen steeply; in 2009 it rose to approximately €260 million, which is a 30 % increase on 2008. Further significant increases are planned between now and 2012. From 2013, the German Government intends to make €500 million available each year to support the worldwide creation of the enabling environments and capacities needed to preserve global biodiversity and forests in the long term.

This publication describes the conceptual principles and funding models that currently exist and details the regions of the world in which support programmes are being implemented and the partners we are working with.

Dirk Niebel
Federal Minister for Economic Cooperation and Development

Introduction

The German federal government is firmly committed to the worldwide effort to conserve biological diversity. The Convention on Biological Diversity, which has binding force under international law, is the central framework for action. Its three objectives are:

- the conservation of biological diversity ,
- the maintenance of biodiversity through its sustainable use, and
- the equitable sharing of the benefits arising from its use.

The present rapid loss of biodiversity jeopardises the services that nature provides for humankind, like food, clothing, medicine, clean water and much more. In many cases, the poorest people in the world also depend on it directly for their very survival. For them, biological resources are the immediate basis of their livelihoods and, more often than not, the only economic capital at their disposal. Biodiversity loss threatens to increase poverty and undermine development. The conservation of biodiversity is consequently a key development policy objective. Germany therefore supports its partner countries around the world in protecting biodiversity, using it sustainably and sharing its benefits equitably.

This publication demonstrates the efforts being undertaken as part of German development cooperation in the field of biodiversity. It describes the interrelations between biodiversity, poverty alleviation and climate change and explains the conceptual principles of conservation and sustainable use of ecosystems. Instruments and funding models that currently exist to promote conservation and sustainable use of biodiversity are explained and illustrated with concrete examples. Finally it lists, country by country, biodiversity related programmes within technical, financial and human resource cooperation.

Since the mid-1980s, Germany has supported over 500 programmes and projects worldwide that have contributed to the conservation and sustainable use of biological diversity. More than 90 % of these are bilateral or regional projects in financial, technical and human resource cooperation and have a term of 10 to 15 years. The remaining 10 % are supraregional sectoral projects that mostly develop and test certain concepts and tools for the conservation and sustainable use of biodiversity. These include the Implementing the Biodiversity Convention programme, which aims to support partner countries in fulfilling their obligations under the CBD. It also promotes the mainstreaming of biodiversity concerns into German development cooperation and tests new advisory and management approaches to prepare them for wider use.

At the event held to launch the International Year of Biodiversity 2010 in Germany, Chancellor Merkel stressed that the loss of biodiversity poses no less of a threat than climate change to our livelihood base, to sustainable development, and to poverty reduction in Germany's partner countries. This is very much reflected in Germany's development policy in the form of an increase in financial commitment. While the yearly disbursement level amounted for quite some time were around €100 million for biodiversity programmes as part of financial and technical cooperation, in 2008 German Chancellor Angela Merkel pledged additional €500 million for the period 2009-2012 for the protection of forests and other ecosystems. As of 2013, half a billion Euros per year will be contributed by the German Government. In 2010 more than €220 million were newly committed under that topic, so spending will further increase in the next few years.

In terms of regional distribution of funding on biodiversity, Latin America is the most important continent for German development cooperation: almost 50 % of all funds for technical and financial cooperation are used to implement such programmes and projects in Latin America, followed by sub-Saharan Africa at 29 % and Asia & Pacific at 12 %. Biodiversity does not yet play a major role in cooperation with the countries of North Africa, the Middle East and countries in transition.

In Latin America, Brazil is by far Germany's most important partner for biodiversity issues. Ongoing operations comprise more than €140 million and cover both the Amazonian Rainforests and the coastal ecosystems of Mata Atlântica. Brazil is followed in the list of partner countries by Ecuador, where Germany supports programmes amounting to over €60 million. Bolivia, Colombia, Paraguay and Peru are other important South American countries. In Central America, biodiversity conservation and sustainable use is focused on the Dominican Republic and Nicaragua.

In Subsaharan Africa, one focus of German development cooperation is the Congo Basin, where COMIFAC, the Forestry Commission of Central Africa, is a main partner. With

Cameroon, the Central African Republic, the Democratic Republic of Congo, and the Republic of Congo the cooperation works on a bilateral basis. Germany furthermore supports in Subsaharan Africa major biodiversity projects in Benin, Côte d'Ivoire, Madagascar, Mauritania, Namibia, and Tanzania.

In transition countries, German development cooperation is focused on the South Caucasus and Central Asia. The South Caucasus Programme with an overall portfolio of over €22 million covers the states of Armenia, Azerbaijan and Georgia, and is implemented jointly by GTZ, KfW and CIM. The Central Asia programme covers Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and to some extent also Uzbekistan.

Viet Nam, the Philippines and Mongolia are Germany's main partner countries in the field of biodiversity in Asia. Other countries which receive significant funds from German development cooperation in Asia include Bangladesh, China and Indonesia.

German development cooperation institutions

Within the German Federal Government, the Federal Ministry for Economic Cooperation and Development (BMZ) is responsible for financing, planning and coordinating development cooperation activities and for developing corresponding policies, principles and programmes. German development cooperation is therefore coordinated by a cabinet-level ministry that is independent of the Foreign Office, while specialised agencies are responsible for implementing programmes and policies.

BMZ is the main government department financing official development assistance (ODA). Other sources of ODA in the field of biodiversity include the Federal Ministry of Education and Research (BMBF) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). However, as a result of the growing bilateral ODA engagement of other ministries, the number of German actors is increasing, and structuring German ODA as an integrated whole is now more challenging.

Development cooperation covers both bilateral and regional cooperation as well as contributions to multilateral organisations. These organisations play a leading role in the implementation and coordination of development cooperation in partner countries. They realise large-scale programmes in partner countries and their special legitimacy enables them to coordinate the inputs of various donors. International organisations are funded by their member countries. Germany's membership of international organisations gives it the opportunity to share its views and experiences on the global stage.

German development cooperation programmes are conducted within the framework of financial cooperation (FC), technical cooperation (TC) and human resources cooperation, with different organisations responsible for their implementation. In addition to bilateral measures and the provision of funds for multilateral programmes, Germany supports trust-based projects (Funds-in-Trust, FIT), which are conducted on the basis of cooperation between the German Government and international organisations. In the field of biodiversity, German development cooperation is implementing a number of projects in collaboration with international organisations, including non-governmental organisations active in nature conservation and environmental protection such as the World Wide Fund for Nature (WWF) and the International Union for Conservation of Nature (IUCN).

The KfW Entwicklungsbank – Germany's leading development bank – allocates financial cooperation funds on behalf of the Federal Government and States to finance investments and advisory services in partner countries. KfW works there with governmental

institutions. Its aim is to build and expand social and economic infrastructures and to create efficient financial institutions while protecting resources and the environment. KfW is also responsible for implementing debt-for-nature swaps, which reduce the national debt of partner countries in return for a local focus on biodiversity conservation. In addition, KfW is a member of the Conservation Finance Alliance, a collaborative network of major non-governmental and governmental agencies that pursues innovative approaches for funding the in-situ conservation of biodiversity.

Technical cooperation is all about boosting the performance capacity of both individuals and organisations. It contributes to enhance the political and institutional framework for sustainable development in partner countries. Technical cooperation transfers and mobilises knowledge and skills and works with its partners to create and develop an environment where these can be applied. The aim is to enable people to improve their living conditions through their own efforts. The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and the German Development Service (DED) are responsible for carrying out technical cooperation activities on behalf of the German Government.

GTZ is a federally owned organisation. It works worldwide in the field of international cooperation for sustainable development and its mandate is to support the German Government in achieving its development objectives. GTZ provides viable, forward-looking solutions for political, economic, ecological and social development in a globalised world. It promotes complex reforms and change processes. The corporate objective is to improve people's lives on a sustainable basis. In this context, GTZ's core competency is capacity development, i.e. the ability of people, organisations and societies to shape development on a sustainable basis. This entails identifying problems and then developing and successfully implementing strategies to reach solutions. Most of GTZ's activities are commissioned by BMZ, but it also operates on behalf of other German ministries, the governments of other countries and international clients. GTZ acts on a public-benefit basis, channelling all surpluses back into its own international cooperation projects for sustainable development. GTZ has operations in 128 countries in Africa, Asia, Latin America, the Mediterranean and Middle Eastern regions, as well as in Europe, the Caucasus and Central Asia.

DED is a non-profit organisation and an implementing agency of BMZ. DED is cooperating with governmental partners as well as with civil society and private sector organisations in 47 countries. DED contributes to projects of partner organisations as well as to

complex development and reform processes, benefiting from its particular competence at the micro and meso level. DED's technical advisors thereby help to adapt the concepts and procedures outlined in national policies to reflect the reality at target group level. This is achieved by facilitating and analysing the implementation of these policies and ensuring that target groups and beneficiaries are involved in the process.

KfW, GTZ and DED are working closely together in many countries on programmes concerning the conservation and sustainable use of biological diversity.

Another key component of development cooperation is human resources cooperation, which involves the secondment of experts to partner countries. The Integrated Experts Programme supports state and non-governmental organisations by placing technical experts with them in addition to those already assigned to them within the scope of technical cooperation. The Centre for International Migration and Development (CIM), run jointly by GTZ and the International Placement Services (ZAV) of the Federal Employment Agency (BA), arranges the placement of experts in developing countries and provides salary subsidies. CIM personnel work for both governmental and non-governmental organisations in partner countries.

InWEnt - Capacity Building International, Germany is an organisation for international human resources development, advanced training and dialogue. It promotes the capacity building of experts from developing countries and conducts seminars and workshops for enhancing the exchange of knowledge and experience in development cooperation. InWEnt gives people the necessary skills to pass on their capabilities to others and to effect long term structural changes, thereby shaping globalisation fairly and encouraging sustainable development. It also offers grants to enable delegates from partner countries to participate in international events.

In the near future, GTZ, DED and InWEnt will merge to form one organisation for international technical cooperation.

Millennium Development Goals

The Millennium Development Goals (MDGs) provide an important frame of reference for German development cooperation. The German Government launched its Programme of Action 2015 as a contribution to the goal of halving absolute poverty by 2015. The programme sets out ten priority areas for action and a range of activities tackling various dimensions of poverty. It also establishes worldwide poverty reduction as a theme that cuts across all German Federal Government policies. An understanding has emerged that different policy areas need to work together to make progress towards halving poverty. In development cooperation, the task is to provide concrete poverty-reducing inputs across various sectors in Germany's partner countries and in international processes.

In September 2010, a high-level MDG+10 event was held in New York to review progress towards achieving the Millennium Development Goals. It is clear that many challenges will persist beyond 2015. In discussions on the future of the Millennium Declaration and the MDGs, it is necessary to look at possible future measures and review lessons learnt and good practices. The outcome for the global community should be a reference framework for international development beyond 2015.

To mark the International Year of Biodiversity, the United Nations General Assembly held a high-level event on biodiversity on 22 September 2010 in the run up to the general debate of its 65th session. This event raised awareness of the global biodiversity crisis and the urgent need for stronger action to implement the Convention on Biological Diversity (CBD) in order to achieve its objectives. The high-level event included dialogues on issues of strategic importance to the CBD. Roundtable discussions were held on post-2010 biodiversity targets, the links between climate change and biodiversity, and the importance of biodiversity for poverty alleviation and development as well as for achieving the MDGs. The event also served as a contribution to the High-Level Plenary Meeting of the 65th session of the General Assembly on the achievement of the Millennium Development Goals.

The 2010 target to significantly reduce the rate of biodiversity loss was adopted by the General Assembly for Millennium Development Goal 7 ('to ensure environmental sustainability'). The Parties to the Convention committed themselves to the target in 2002, and actions to achieve were incorporated into the Plan of Implementation of the World Summit on Sustainable Development.

This event shows that maintaining biological diversity is one of the key issues in combating poverty and attaining the MDGs, as illustrated by the following examples:

- Preserving agrobiodiversity and limiting the risks posed by genetic engineering is essential if we are to achieve food security.
- Generating income by marketing the products of biological diversity and equitably sharing any benefits arising from the use of genetic resources also contributes to poverty reduction.
- Conserving biological diversity is an important factor in attaining environmental sustainability, for instance through the sustainable management of protected areas.
- Medicinal herbs and traditional medicine are often the only options available for treating diseases and injuries and are therefore an essential part of medical care.
- The conservation of biological diversity also contributes to preventive healthcare. Studies by the World Health Organisation found that 6 of the 24 most frequent causes of disease can be attributed to adverse environmental conditions.

In addition to the MDGs, there are several other international processes which also address the loss of biodiversity. In 2002, governments supporting the Johannesburg Plan of Implementation and taking part in the 6th Conference of the Parties to the CBD pledged to achieve a significant reduction in the rate of loss of biodiversity by 2010. This target is a milestone on the path towards attaining the MDGs. Given the crucial role played by biodiversity in sustaining people's livelihoods in many of our partner countries, particularly the poorer segments of the population, attaining this interim target will be evidence of a tangible improvement in the lives of many people.

German development cooperation working towards both the 2010 target and the MDGs operates at many levels. In partner countries, contributions can be made at both national and local level to improving the national framework conditions and to encouraging the population

to actively participate in the development process. One of the main challenges is integrating biodiversity objectives into other political and planning processes and sectors. So far, however, efforts to mainstream the National Biodiversity Strategies and Action Plans (NBSAPs) have not always been effective. Although by 2010 170 of the 193 parties had already developed their NBSAPs – particularly in developing countries – these plans have, for the most part, not had the desired impact at national policy level, since they generally

- are concentrated on nature conservation and protected areas management,
- did not highlight sufficiently the links to the national implementation of the other Rio Conventions and Agenda 21,
- did not draw attention to the added economic and social value of biodiversity conservation,
- did not specifically address interfaces to other political and economic sectors as well as poverty reduction strategies,
- were not well promoted and as such were widely unknown to all but the 'green' departments.

In 2007, against this background, BMZ signed a Memorandum of Understanding (MoU) with the Secretariat of the Convention on Biological Diversity (SCBD) on joint capacity development efforts at the interface of biodiversity management, development and poverty alleviation. The GTZ supraregional programme 'Implementing the CBD' organises activities in collaboration with SCBD, such as workshops, studies and the development of learning materials, in the context of NBSAP improvement, Protected Area Management, Access and Benefit Sharing (ABS) and Communication, Education and Public Awareness (CEPA). In 2008, BMZ seconded a staff member for two years to the Biodiversity and Development Unit of SCBD in Montreal, which is funded by voluntary contributions. Together with a colleague funded by the French Government, the BMZ expert reviewed all CBD programmes to assess their engagement with development issues. Based on many case studies, a series of publications on biodiversity, development and poverty alleviation have been developed and disseminated – including an introductory reader as well as papers and brochures focusing on specific sectoral issues. Based on a range of good practices and lessons learnt from German development cooperation, the Biodiversity and Development Unit developed a document outlining a capacity building framework which supports the mainstreaming of biodiversity into planning and development agendas. This document, which includes a call for action by parties and other stakeholders, has been reviewed and agreed by the 3rd CBD Working Group on the Review of the Implementation of the Convention (WGRI 3, Nairobi, May 2010). It will be forwarded to the 10th Conference of the Parties in Nagoya under the title Integrating Biodiversity into Development and Poverty Eradication, together with a recommendation that it is adopted by the Parties. For the first time, development and poverty eradication have been identified as distinctive issues which need to be included in the official agenda of the Convention, which in turn supports other multilateral environmental agreements and the MDG review process.

Governance of biodiversity

Biodiversity conservation requires a governance approach that balances development needs with the safeguarding of ecosystems and their functions. Indeed, many causes of ecosystem and biodiversity degradation are rooted in governance shortcomings both within and outside of the green sector. Development policies influence biodiversity, the value placed on it and attitudes towards it, especially with regards to those making and enforcing decisions. In this sense, to be effective, a governance approach that fosters biodiversity conservation must be implemented across a wide range of sectors at global, national and local level, take a broader perspective and include different dimensions of sustainable development.

Governance is about social interactions and who makes the decisions, but also about how these decisions are made and how they are enforced, which ultimately affects the way people access and use natural resources. In order to address governance issues to achieve more biodiversity-friendly and equitable outcomes it is therefore necessary to understand and adapt the formal and informal mechanisms underpinning regulations, enforcement procedures and coordination. These interactions are shaped by the particular context and timeframe within which governance decisions are made. In addition, beliefs, values and ideals influence people's attitudes towards nature, society, government and individual responsibilities. It is clear that, in order to protect ecosystems and improve livelihoods, it is essential to involve local people in biodiversity conservation and other development processes. Effective participation is contingent not only on the recognition of people's rights, but also on their knowledge and experiences. Although involving local communities does not always guarantee that conservation and sustainability goals will be achieved, a participatory approach greatly increases the probability of success.

German development cooperation works with its partners to improve governance structures and processes as part of natural resource management programmes worldwide. It also supports governments in improving governance structures in ministries and other institutions and provides advice on the development and implementation of policies, legislation and administrative procedures that have a bearing on biodiversity. Furthermore, it supports the actors involved, including civil society, indigenous peoples and local communities, in developing technical and negotiation capacities, enabling them to participate effectively in decision-making processes concerning the access to and use of ecosystem goods and services.

A more targeted approach involves analysing the governance issues concerning a specific area or resource in order to improve cooperation among actors, build consensus and transform incentives that have a negative impact on biodiversity. Interventions based on this analysis seek to improve social interaction between people and institutions in order to ensure the development of fair arrangements that conserve resources, minimise conflict and lead to more equitable access and use. Specific interventions include the strengthening of institutions (from environmental ministries to platforms for dialogue on a particular resource), the development of incentive mechanisms for conservation (such as Payment for Ecosystem Services or Access and Benefit Sharing in relation to genetic resources) and facilitating participation and cooperation among actors (such as the Collaborative Management of protected areas).

A particular challenge of biodiversity governance, especially at local level, is the interface between the customary governance processes and institutions of Indigenous Peoples and Local Communities (IPLCs) on one hand, and the formal processes and institutions of the state on the other. Customary governance of biodiversity by IPLCs, based on their traditional knowledge and biocultural values, can be very effective and resilient and is uniquely adapted to the local context. International instruments

such as the CBD therefore call for the recognition of such governance systems and of the rights of IPLCs to their lands, resources and knowledge. Biodiversity projects supported by German development cooperation are often required to operate at this interface, facilitating dialogue between customary and formal institutions and finding governance solutions tailored to each specific situation. Over the past few years, efforts have been made to develop principles and instruments to promote this interaction.

Free, Prior and Informed Consent and Biocultural Community Protocols

The right to Free, Prior and Informed Consent (FPIC) is an important principle for indigenous peoples and local communities, allowing them to safeguard the governance of their lands and resources. It provides them with a basis for interactions with other actors seeking to gain access to these assets. However, while international law is increasingly recognising the right to FPIC, there still is a significant gap between this recognition and actual practice. This is not just because FPIC has only been partially integrated into state laws or sectoral standards, but also because there is still considerable confusion regarding the most effective way for IPLCs to exercise this right and the best way for outsiders to respect it. It is therefore important to support communities in implementing this concept in their specific context, within national policy frameworks and in accordance with customary rules and laws.

In Indonesia, GTZ is supporting a project run by the Forest Peoples Programme (FPP) and the Aliansi Masyarakat Adat Nusantara (AMAN), the Indigenous Peoples' Alliance of the Archipelago. It develops community capacities to negotiate with loggers, timber plantations, oil palm companies and local government agencies zoning their lands as protected forests. The communities seek to apply the principle of FPIC to every situation. The objectives are to improve management and to engender respect for their livelihoods and rights by encouraging district authorities and companies to accept the FPIC principles either through certification standards (FSC : Forest Stewardship Council and Roundtable on Sustainable Palm Oil:, RSPO) or as part of Regional Autonomy laws and forest gazettement procedures. The lessons learned about FPIC will be integrated into the national decentralisation process and are expected to become the basis for regional planning processes. The FPIC process is not restricted to interactions that take place prior to an intervention on indigenous lands, but it can also be used to tackle existing situations which are the result of decisions that have been taken in the past . In cases such as these, the FPIC process can lead to reparations and/or to a new arrangement which is legally secure and supported by all actors involved.

The term 'Biocultural Community Protocol' (BCP) is used to cover a wide range of documents generated by communities to establish the way they expect other stakeholders to engage with them. BCPs are developed by the community through a consultative process. They outline the core biocultural values of the community as well as the customary laws relating to its biological resources and traditional knowledge. Based on this, they provide clear terms and conditions regulating access to those resources and knowledge. They may also reference relevant national and international legislation affirming the rights of the community. BCPs provide communities with an opportunity to learn about their rights under national and international law and to reflect on their development aspirations vis-à-vis these rights. The protocols help to articulate, for themselves and for others, their understanding of their biocultural heritage and therefore establish on what basis the community will engage with different stakeholders. Presenting relevant information on customary laws and institutions in this way helps other stakeholders to gain a better understanding of the community's values and governance system.

The BCP concept was originally developed as part of the Access and Benefits Sharing (ABS) initiative in relation to genetic resources as a way of securing the prior informed consent of local communities. However, this instrument can be applied to a range of different situations in which communities are required to interact with external stakeholders expressing an interest in their resources, for example in the context of protected areas or mechanisms for Reducing Emissions from Deforestation and Forest Degradation (REDD). Through the ABS Capacity Development Initiative for Africa, German development cooperation is supporting the work of Natural Justice, an NGO based in South Africa which is helping communities to develop their legal capacity to demand social and environmental justice. Natural Justice has so far supported several communities in Southern Africa and India in developing BCPs. These include the Raika Pastoralists in Rajasthan, India; the Samburu Pastoralists in Kenya; the Vaidyas – traditional healers – in the Malayaki Hills in Tamil Nadu, India; the Gunis – traditional healers – and medicinal plants conservation farmers in Mewar, Rajasthan; and the Buckbridge traditional healers in the Kruger to Canyons Biosphere Reserve in South Africa.

Integrating biodiversity concerns into Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is a systematic process for evaluating the environmental consequences of a proposed policy, plan or of programme initiatives in general. It ensures that such concerns are considered on a par with economic and social dimensions and are properly addressed at the earliest appropriate stage of decision-making. SEA is widely applied in industrialised countries in the context of infrastructure investment plans, spatial planning and sectoral development programmes. The approach is also being used more frequently in partner countries to enable informed decisions to be made which focus on sustainable development.

SEA is considered an essential instrument in development cooperation and it has become even more important since the focus of the agencies operating within the field has shifted from supporting individual projects to providing support for broad policies and strategies. International conferences and agreements such as the Paris Declaration on Aid Effectiveness commit donors and their partner countries to 'developing and applying common approaches for Strategic Environmental Assessment'. The OECD's Development Assistance Committee (DAC) has published a document entitled "Good Practice Guidance on Applying SEA in Development Cooperation".

Since a policy, plan or programme might significantly influence biodiversity directly (e.g. through impacts on protected ecosystems) or indirectly (e.g. through changes in production or consumption patterns which subsequently have an effect on biodiversity), the Convention on Biodiversity (CBD) recognises that impact assessment is an important tool which can help to maintain a focus on this issue in the planning and implementation of development measures. In 2006 the 8th meeting of the Conference of the Parties issued voluntary guidelines on biodiversity-inclusive impact assessment. These provide guidance on whether, when and how to consider this topic in both project and strategic-level impact assessments.

German development cooperation is involved with SEAs in several countries in order to develop and strengthen the necessary legal framework and to provide guidance on practical implementation. These countries include

Benin, China, Mali, Mauritania, Namibia, and Viet Nam. In Namibia, German development cooperation has been supporting the natural resources sector since 1994 and it has placed great emphasis on developing a progressive policy and legal framework.

The Environmental Management Act (EMA), which was passed by the Namibian Parliament in December 2007, is an important achievement that strikes a balance between rapid economic development and conserving Namibia's fragile environment. The Ministry of Environment and Tourism (MET) is responsible for establishing the regulatory and institutional framework to implement the Act effectively and local experts and GTZ are supporting it in this task. GTZ provides technical advice on drafting regulations and procedures for implementing the Act and it also supports institutional development, measures raising public awareness and networking. In cooperation with GTZ, a proposal has been developed for the structure of the new Environmental Commission, which will operate within MET. In order to raise awareness of the new Act among stakeholders and the Namibian public, a documentary film – entitled *A Balancing Act* – and a simple Guide have been produced and widely distributed. Furthermore, experts from Namibia and Germany have helped to provide a training course on SEA which is based on the Harvard case study method and focuses on land use planning. This has facilitated the introduction of this instrument.

In addition, GTZ is also supporting several voluntary pilot SEAs led by government authorities to gain experience with this new approach in the Namibian context. These include the Uranium mining development in the Erongo Region, which is led by the Ministry of Mines and Energy (MME), with support from GTZ and the Chamber of Mines. This SEA focuses on the 'Central Namib Uranium Rush', which began in response to the rising market price of uranium and Namibia's considerable, unexploited resource base. Several new mines are now in operation and others are in development and it is therefore important to find a balance between the various development activities, such as tourism, urban expansion, water management and land-use planning. The SEA will support the implementation of a strategic planning approach that will help Namibia to develop all the aspects of its resource base, while at the same time avoiding any choices that present significant opportunity costs, especially to areas with important tourism potential, national parks with high endemism, National Heritage Sites and communal conservancies.

Another SEA that GTZ is involved with is bio-fuel production in the Caprivi and Kavango regions. Foreign investors are showing increasing interest in the large-scale cultivation of oil crops, mainly *Jatropha curcas*, for bio-diesel production in the north-eastern communal areas of Namibia. For the development of a bio-oil energy industry in Namibia to be sustainable, traditional authorities and relevant ministries must undertake detailed assessments of land uses and land rights, environmental clearance certificates and the impacts of different enterprise models on food security and social conditions. Before large-scale bio-fuel production commences, it is critical for Namibia to conduct an SEA so that decision-makers understand the environmental advantages and disadvantages of this type of land-use. This is also particularly important in view of the expected effects of climate change. MET has therefore been tasked by the Cabinet of Namibia with carrying out this SEA and GTZ will provide support.

The costs, outcomes and best practices of these ambitious SEA applications and their impact on biodiversity-sensitive development planning must be carefully revised. GTZ will support MET in evaluating these pilot assessments in order to use the lessons learnt to refine the framework underpinning the mandatory SEAs which will be implemented under the Environmental Management Act.

Climate change

The relationship between climate change and the loss of biodiversity is highly complex and so far only limited research has been conducted on the subject. It is, however, already widely known that there are many connections between climate change and the decline of biological diversity. On the one hand, climate change has become one of the biggest threats to biodiversity. Although climatic changes have always been part of the history of the Earth, the speed of the current changes, to which human activities have contributed, is unique. The temperature rise expected within the next 100 years is similar to the increase that has taken place over the course of the last 10,000 years. It is uncertain to what extent species and ecosystems will be able to adapt to these fundamental changes – for example by physiological adaptations of species, change in the species composition of ecosystems, or shifting of distribution areas to more suitable regions. At the same time, the increasing pressure of climate change is intensifying some of the other main anthropogenic causes of biodiversity loss, for example the overuse of ecosystems. Eventually, 'tipping elements' in the Earth's climate system will pose a threat. This means that, if critical thresholds are passed, the result could be an irreversible change to plants and animals. For example, one fear is that an as yet undetermined temperature rise over the next 50 to 100 years could turn large sections of the Amazon rainforest into a savannah ecosystem. This would lead to the disappearance of one of the global ecosystems with the richest variety of species and the loss of a vast carbon sink, with immeasurable consequences for the global climate. At the same time, biodiversity makes an important contribution to climate protection and adapting to climate change. Undamaged, biologically diverse ecosystems – in particular jungles, lakes and peat bogs – store large quantities of carbon. The storage capacity of these areas is normally far greater than that of agricultural monocultures, such as plantations for producing palm oil. Biological diversity does not just play an important role in our climate through the carbon cycle. It also influences the water cycle and microclimates. Water evaporating from plants ultimately falls to Earth again as precipitation and causes a temperature decrease, but as forest areas continue to reduce in size, this could happen less.

In addition to providing climate regulating services, intact ecosystems can also offer important ways of adapting to changing climates. They play a particularly crucial role in preventing and mitigating the impact of natural disasters. In this context, biological diversity acts as a buffer or a risk prevention mechanism. This is demonstrated by the following examples:

- Wetlands provide natural protection against increasingly frequent flooding and the local and regional replenishment of groundwater.
- Mangroves and coral reefs help to protect costal zones from extreme weather events, such as typhoons.
- Mountain forests help prevent avalanches and landslides, which can occur as a result of greater rainfall.
- High levels of agrobiodiversity offer additional adaption options. For example, more drought-resistant crop plant varieties can counter the risk of food production failure in areas where rainfall is decreasing, thus contributing to food security.

However, ecosystems do not just help communities to adjust to climate change. They themselves must also adapt to changing climates. The climate system is very slow to respond and so, even if the worldwide production of greenhouse emissions were stopped immediately, the global temperature would still rise by around 1°C. Investigating and promoting the adaptability of ecosystems is therefore crucial. Which species are most sensitive? How can we facilitate migration?

Research and concrete implementation procedures are still in their early stages. Biodiversity and climate change and the interaction between them are therefore priority areas for German development cooperation.

- GTZ is analysing the vulnerability of ecosystems, and such measures are being carried out in several countries, including Tunisia and Peru. The results provide the first basis for making decisions about identifying and prioritising adaption measures in relation to changing ecosystems. They will enhance the current, largely sectoral approaches to assessing the effects of climate change, for example on agriculture.
- Development cooperation is taking an increasing interest in approaches that do not just aim to conserve ecosystems within individual protected areas, but seek to create links between undamaged landscapes with the help of 'eco-corridors.' This should facilitate the movement of wildlife forced by climate change to relocate or migrate. These concepts rely on the conservation of semi-natural areas on private and community land and require an integrated approach.

In general, the aim is to systematically 'climate proof' all relevant development cooperation projects in the future. This sort of analysis will reveal to what extent climate change could influence the achievement of project objectives and it will also determine which adaption measures can be implemented.

In summary, almost all development cooperation programmes that focus on conserving biodiversity also contribute to climate protection and climate change adaption. Thus climate change is also becoming increasingly important for the Convention on Biological Diversity (CBD). In 2009 the first report by the CBD Expert Group on Biodiversity and Climate Change was published and included in the negotiation process of the UN Framework Convention on Climate Change. In addition, discussions are now focusing on how the three Rio Conventions – on climate change, biodiversity and desertification – can be brought together not just in the existing Joint Liaison Group, but also in other ways, such as a joint work programme. This will draw more on the obvious synergies between the three conventions.

The International Climate Initiative

The International Climate Initiative (ICI) has been financing climate protection projects in developing and newly industrialising countries as well as in transition countries in Central and Eastern Europe since 2008. The International Climate Initiative receives funding from the emissions trading system and thus it represents an innovative funding mechanism for supporting countries in promoting climate protection. ICI is an initiative established by the German Federal Ministry for the Environment, Nature Protection and Nuclear Safety (BMU) and enhances the existing development cooperation of the German government, making a significant contribution to increasing the overall Official Development Assistance (ODA) quota.

The ICI has three pillars: Promoting a climate-friendly economy, promoting measures for adapting to the impacts of climate change and promoting measures for the preservation and sustainable use of natural carbon sinks/ Reducing Emissions from Deforestation and Degradation (REDD). While the first pillar is mainly concerned with finding technical solutions to mitigate climate change, the other two pillars are closely related to biodiversity conservation and sustainable use and as such provide additional funding for projects in this area.

In the context of the second pillar (adapting to climate change), ICI supports partner countries in implementing national adaptation programmes. Using integrated approaches, the projects cover a number of different areas, for example biodiversity conservation, water resource management, sustainable land use and restoration of damaged areas. About 10 % of ICI's projects are in the field of adaptation. In relation to the third pillar, ICI supports REDD projects for conserving carbon sinks, especially in forests and other ecosystems such as wetlands. Activities in this field aim to improve synergies between climate protection and biodiversity conservation. Almost 30 % of funding is allocated to projects in this area. The main regions for these projects are South America (Amazon rainforest), Africa (Congo Basin) and Asia (Indonesian rainforest).

Since the International Climate Initiative first began in 2008, BMU has launched 181 projects with funding totalling around €354 million. These projects will last up to five years. Taking into account contributions made by the institutions implementing the projects and additional sources of public and private financing, the overall funding for International Climate Initiative projects amounts to over €1 billion.

ICI supports for example the Government of Rwanda in countering the degradation of natural resources through the project Preserving Biodiversity in the Nyungwe Forest. Rwanda is a biodiversity hotspot and the Nyungwe Forest is East Africa's largest mountainous cloud forest, home to numerous endemic species. However, the pressure on forests in this country is intense. Population density is high and 90 % of Rwandans make a living from subsistence farming. As a result, soil fertility is rapidly degrading and farmers therefore need more virgin land. Agricultural and forestry production in areas bordering the cloud forest must be intensified in a sustainable way to reduce pressure on forest resources. The project aims to conserve biodiversity and the ecological functions of the Nyungwe Forest, which acts as a carbon sink and is vital for maintaining a hydrological balance in the region. To this end, an agroforestry belt will be established to facilitate the transition to sustainable forms of agriculture and forestry in the areas around the cloud forest. This belt will protect the soil against erosion, guarantee a high level of biomass production per unit of area and reduce the reliance on wood obtained from the forest. At the same time, the tree biomass and organic matter in the soil will continue to sequester atmospheric CO_2 for the long term.

Another ICI project which pursues both climate protection and biodiversity aims is entitled Conserving the Atlantic Coastal Forests. The Brazilian coastal forests (Mata Atlântica) are among the ecosystems most at risk worldwide. This is due to their increasing fragmentation and degradation. Today only 27 % of the original area of the coastal forests has retained its natural vegetation cover. An estimated 40 % of the original species diversity is already extinct. The Brazilian biodiversity foundation FUNBIO set up the Atlantic Forest Conservation Fund (AFCoF) in 2008. The fund finances measures to conserve and restore the coastal forests. Such measures include designating and establishing public and private protected areas, combating forest fires, carrying out reafforestation in buffer zones and ecological corridors and promoting appropriate forms of management. Protecting the remaining forests will counter climate change and contribute to biodiversity conservation. Moreover, the coastal forests play a key role in the water supply of the nearby cities. Conserving these areas is therefore also vitally important in helping communities to adapt to climate change impacts.

The ICI projects are implemented by a wide range of institutions. Most projects are carried out by Germany's two major implementing organisations, GTZ and KfW. BMU also commissions multilateral organisations, non-governmental organisations, research institutes and foundations to take the lead on some projects.

Synergies among international environmental conventions

The Convention on Biological Diversity (CBD), the Framework Convention on Climate Change (UNFCCC) and the Convention to Combat Desertification (UNCCD) each pursue their own specifically defined objectives and contain individual requirements and commitments for the signatories. However, they also have a lot of common ground: they relate to the same ecosystems, stress the same anthropogenic cause of the problems and pursue a common goal – sustainable development. The signatories are faced with similar commitments to implement the conventions, such as accountability with regard to implementation, sensitisation and capacity development, and overall have to grapple with similar challenges, such as territoriality, intersectorality, participation.

Implementation is hindered by the fact that responsibility for the three environmental conventions often lies with different government agencies (ministries) within the States Party to these conventions. Demands for increased coordination were voiced early on at international level. The processes and structures introduced internationally to implement the three conventions promote different procedures and processes, particularly since they were each conceived separately, without reference to the other two. As a result, despite willingness in practice to work more synergistically, there are still difficulties when it comes to coordinated or even joint implementation. German development cooperation supports individual signatories in exploiting synergies in implementing the Rio conventions in countries such as Mali, Morocco, Mauritania, Peru and Tunisia. Most activities are designed to make use of links between the aims and activities of the conventions. At operational level these activities fall into five areas:

Supporting mechanisms for concerted action. The core areas covered by the Rio conventions include soil, water, ecosystems and agriculture. Therefore, if implementation is to be effective, close coordination between the different sector institutions is crucial. However, this has proved to be one of the major challenges, especially at national and regional level. German development cooperation is promoting communication and coordination between the key actors, for example by financing regular coordination meetings on transversal environmental issues (Mali), creating a platform for informal communication between the focal points of the Rio conventions (Morocco), and supporting mechanisms for concerted action across issues related to biodiversity, climate and desertification (Tunisia).

Sensitisation and environmental education measures. The commitments of the three conventions include sensitisation and capacity development measures. They are an ideal starting point for coherent implementation. In addition to organising and running conferences, seminars and workshops, and advising on teaching modules at universities, the following activities are also being carried out and are beginning to show results:

In Tunisia, to celebrate International Biodiversity Day, GTZ organised professional guided tours in national parks to sensitise teachers and school students, who then made posters about Tunisia's principal ecosystems. The posters examined the importance of these ecosystems for sustainable development and the additional pressure expected as a result of climate change. The information gathered was made available to a broad audience through exhibitions and reports on Tunisia's public television.

In Morocco, GTZ is supporting a capacity development process in the Tafilalelt region, which was instigated by a national research institution. The oases region, part of the biosphere reserve designated by UNESCO in 2000, is severely threatened by desertification processes and has also been at risk from the first effects of climate change for some time. In a number of workshops, 50 representatives of local development agencies were sensitised to the problems and interdependencies between biodiversity, climate change and desertification. This was followed by a practical training course on project design, funded by the GEF's Small Grants Programme, during which participants were already able to transfer this knowledge to their region and take it into account when identifying and describing their microprojects.

Advice on integrating biodiversity, climate change and desertification concerns into national and regional planning processes and development strategies. Experience has shown that the separate planning processes

initiated as part of multilateral environmental agreements have not always brought about the desired changes at local level. Integration of the concerns of the conventions into existing national development processes is now increasingly being called for. German development cooperation is supporting this in Mali, for example, by developing a guidance document on integrating the conventions into planning processes. It is also intended to guarantee that they are taken into account in development projects. The Malian government, supported by the World Bank, the Global Mechanism, UNDP, TerrAfrica and GTZ, is also developing a strategic frame of reference, which is to be used for all investments in the area of sustainable land management. Thanks to advice from German development cooperation, synergies with the other conventions are also being incorporated into national convention strategies and plans. This is happening, for example, in the development of a national climate strategy in Tunisia and in the updating of Morocco's National Action Plan on Combating Desertification. In Peru, GTZ is supporting Piura's regional government in breaking down the Rio conventions and the national environment strategy into elements appropriate for use at regional level and integrating them into planning and investment processes. In Mauritania, legislation on pasture management, which has integrated the concerns of the CBD and UNCCD conventions, was established with advice from GTZ.

Development and implementation of pilot projects. Synergies are particularly useful when they have tangible and quantifiable added value. This added value can be seen at local level in very practical measures. An example is the advice on re-greening degraded land in arid areas, which GTZ provided in Tunisia. The re-greening is being carried out using local species and drip irrigation using water from oases.

Advice on applied research. German development cooperation also advises actors from the public administration, scientific community and academia on applied research. In Tunisia, a methodological approach to performing vulnerability analyses for ecosystems that face greater pressure from climate change (including increased desertification) was developed and piloted. Early findings are already being used to draft and prioritise adaptation measures and have been made available to planners at national and regional level for integration into their development strategies.

German development cooperation's experience in harnessing synergies in the implementation of the Rio conventions is currently being compiled in the form of case studies and best practices. Over the next few years, there are plans to look at adaptation to climate change and REDD with greater focus on synergistic implementation of the Rio conventions. Other practical experience of political dialogue and implementing and evaluating measures are necessary here.

Ecosystem Approach

The Ecosystem Approach has been developed as a comprehensive planning, decision-making and management concept designed to tackle the shortcomings of problem-solving approaches and to enable the successful implementation of the Convention on Biological Diversity. It describes a 'strategy for the integrated management of land, water and living resources that promotes conservation and sustainable, equitable use'.

The approach recognises that people and their diverse cultures are an integral component of ecosystems and it builds on the premise that it is not possible to draw clear lines between different ecosystems, since no ecosystem in the world is entirely separate from the others and none can function as an entirely closed system. The ecosystem approach is therefore not based on a concept of spatial demarcation. Instead it focuses on the degree to which a specific event (e.g. the outcome of a management decision) can influence the various components of an ecosystem.

The CBD has adopted twelve guiding principles of this holistic approach as its operational framework. They have been condensed into five main points in order to provide operational guidance:

- Focus on the functional relationships and processes within ecosystems;
- Enhance benefit-sharing;
- Use adaptive management practices;
- Carry out management actions at the appropriate scale for each issue, with decentralisation to the lowest level, as appropriate;
- Ensure intersectoral cooperation.

The ecosystem approach aims to combine all existing approaches and methodologies to provide a system for tackling complex situations. In order to implement the CBD, it seeks to develop the principles and operational directives that guide concrete actions, giving equal consideration to social, economic, cultural and ecological factors. It is therefore a useful point of orientation for development cooperation. At the same time this represents a challenge for agency and partner structures as it reorientates management focus, places emphasis on a more systemic approach and therefore looks beyond traditional administrative and jurisdictional boundaries. Ecosystem-based approaches can help to provide balanced assessments of development policy options, offer a way to adapt development strategies to the physical and ecological conditions that exist in individual countries and are essential to promote the incorporation of local and global environmental concerns into sector-specific development decisions.

The ecosystem approach is the first approach towards natural resource management that places the concept of equity at the heart of all actions, whether at global or at local level. The operational guidelines state that all people should have access to the benefits derived from ecosystems and that this access should be equitable and balanced. As a consequence, the approach is also committed to making a contribution to poverty reduction. Furthermore, the ecosystem approach supports the development policy goal of respecting and strengthening the diversity of human cultures and also supports the aim that development cooperation should always contribute to democratisation. Participatory management approaches are an important element of all environmental and resource conservation projects. The decentralisation of decision-making structures and building consensus through democratic processes are integral components of the ecosystem approach.

The ecosystem approach has become more important in German development cooperation over the last decade, especially in projects in the field of natural resource management, land use planning and biodiversity management. A growing number of strategies and measures are being formed to tackle climate change and the ecosystem approach can act as a holistic conceptual umbrella within this field. Ecosystem-based adaptation also encourages the development of strategies and measures to counteract the twin challenges of biodiversity loss and climate change. The ongoing challenge is to promote a broader use of this approach, especially for biodiversity mainstreaming. This will provide solid guidelines to help reduce the negative impact of the productive sectors on biodiversity and will highlight the contribution of biodiversity to economic development and human well-being.

Sustainable land management in drylands

There is almost no other region in the world in which sustainable management of natural resources and conservation of biodiversity are so closely linked with poverty reduction and food security than in arid and semi-arid areas. Drylands cover more than a third of the Earth's surface and provide a livelihood to over two billion people. Those living in rural areas are particularly dependent on ecosystem services. Survival in arid and semi-arid areas would be impossible without efficient methods for using water, suitable cultivation techniques, sustainable pasture management and the conservation of traditional crops and animal breeds. This precarious situation is exacerbated by desertification, which is land degradation resulting from the overuse of natural resources.

Biodiversity in drylands has optimally adapted to the extremely difficult conditions present in this type of landscape. It is, however, particularly vulnerable to human intrusion and climate change. To conserve biodiversity, sustainable land-use methods are therefore of vital importance for these regions. Local communities have often developed sophisticated cultivation systems or forms of pastoral farming. In view of the expected impact of climate change, the genetic diversity of plants and animals is even more important for adaption measures. For example, in times of climate change, seeds that are resistant to drought and aridity are even more valuable. In addition, given the prediction that rainfall will become increasingly variable, e.g. in the Sahelian zone, it will become increasingly important to safeguard varieties with a short cultivation cycle. Biodiversity in drylands has great international significance, both for food security and for agricultural, medical and biotechnological research and use.

Germany is one of the biggest donors in the area of sustainable land management in drylands. German development cooperation, for example, supports its partners in integrating biodiversity conservation and sustainable land use in drylands into the relevant planning processes at national and local levels.

A considerable area of the Central Asian steppes, one of the largest natural grasslands in the world, can be found in Kazakhstan, the ninth largest country in the world. Grazing by wild animals, such as the saiga antelope and the Asiatic wild ass, and also by domestic livestock, plays an important role in the ecology of the steppe. It prevents scrub encroachment onto natural grasslands and is therefore a key element in the conservation and sustainable use of internationally important ecosystems with unique plant and animal species. In the past, people in the steppe lived a nomadic life. The herds spent the winter in the sandy desert areas with their characteristic scrub vegetation and the summer in the upland pastures. In between these times, the steppe regions provided hay and valuable feed. During the Soviet era, however, these traditional methods for using the land were largely lost and replaced by settled livestock production and agriculture. Since independence, there has been a transition from a planned economy to a more or less neo-liberal market economy. Reducing state control of the use of resources has now led to an 'open access' situation in many cases. Overgrazing has intensified around villages, but at the same time in a few remote areas the intensity of grazing has in fact decreased.

The economic difficulties experienced after the collapse of the Soviet Union, in conjunction with the opening of the borders with China, resulted in a considerable increase in poaching. For the impoverished rural population, antelopes were a cheap source of meat and were also intensively hunted for their horns, which are in great demand in traditional Chinese medicine. In the 1970s there were still around a million saiga antelopes in Kazakhstan alone. In 2002 the animals were facing extinction with only around 21,000 remaining and they were classified as 'critically endangered' on the International Union for Conservation of Nature's Red List of Threatened Species. GTZ is there-

fore supporting the revival of mobile pasture management and the introduction of the sustainable management of wildlife.

In many villages pasture committees have now been formed to coordinate the use of the land. At the same time, opportunities and incentives for mobile pasture management are being created through improvements in the rural infrastructure, for example the restoration of wells. The balanced and sustainable use of pasture lands makes an important contribution to stabilising rural production and thus to achieving food security. In addition, this conserves the ecosystem of the steppe. Since 2009 these measures have been implemented with the support of financing from the BMZ and the Global Environment Facility (UNDP-GEF) in close cooperation with the Agriculture Ministry of the Republic of Kazakhstan.

The wildlife management project has developed new approaches for the management and use of wildlife. Underpinning these is the notion that the protection of wild animals - in particular the saiga antelope - goes hand-in-hand with generating income and actively involving the population. In this way, new jobs are being created by the development of mobile anti-poaching units. GTZ is collaborating on this project with the non-governmental organisation Association for the Conservation of Biodiversity of Kazakhstan (ACBK) and the Frankfurt Zoological Society (ZGF). In addition, several international specialists are involved in the project work through the Centre for International Migration and Development (CIM). The sustainable wildlife management project is already showing the first signs of success – the saiga antelope population has been recovering over the past few years. On the Betpak-Dala steppe – an area the size of France – the number of animals has risen from less than 4,000 in 2002 to over 45,000 at the beginning of 2009.

Wetland conservation

Wetlands cover around 6 % of the Earth's surface and account for 24 % of the global net primary production of biomass. They are therefore highly productive environments and play a very important role in the global ecosystem as a whole. The word 'wetlands' covers a wide range of different biotopes, encompassing rivers and lakes, marshland and moors, lagoons, as well as man-made areas such as reservoirs and rice fields. They perform a diverse range of ecological functions and services. Wetlands are a source of food and water for people, they act as a flood defence, they filter ground water and they are home to a rich biodiversity. It is only recently that people have become more aware that many wetlands make a considerable contribution to reducing the greenhouse effect. Peat bogs often store large amounts of carbon thus helping to stabilise the global climate. However, in spite of these important functions, wetlands are some of the most endangered ecosystems in the world. As the world population multiplies and the regulated use of rivers as transport routes also increases sharply, the threat to wetlands is expected to continue to intensify. In contrast to other ecosystems, wetlands are greatly underrepresented in the current global system of protected areas. Furthermore, these areas are highly attractive for agriculture, fishing and transport, which results in severe overuse.

The protection of wetlands is the focus of the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention), which was adopted in 1971. Today, 160 states are Parties to the Convention. It is one of the oldest international environmental agreements and provides a frame of reference for international cooperation in the protection and judicious use of valuable wetlands. The Parties to the Ramsar Convention pledge to conserve internationally important wetlands and use them in a sustainable way. They are also obliged to select areas for designation as 'Ramsar sites,' in accordance with criteria set under the Convention. Across the 160 states there are currently 1,867 Ramsar sites with a total area of over 1.8 million km².

German development cooperation supports several countries in protecting wetlands, and the Ramsar Convention, the CBD and the United Nations Framework Convention on Climate Change provide a frame of reference. These measures have been implemented in China, Bangladesh, Viet Nam, Belarus and Turkey in particular. Projects in other countries are also concerned with conserving wetlands, although this forms part of broader approaches towards the conservation and sustainable use of natural resources.

In China GTZ is supporting the Office of Wetland Conservation and Management in the renaturation of wetlands. China is one of the countries with the largest - and greatest number of – wetlands, but drainage of these areas – mainly to expand agricultural land – has had serious effects on the sites. However, as a result of the National Plan for Wetland Protection Action, the Chinese Government is now able to stop the loss of wetlands and restore sites that have already been drained. In view of this essential and extensive set-aside policy, GTZ is working with the Chinese authorities to develop a concept for providing financial compensation. Working with those people who are affected, measures are being developed to enable wetlands to be restored without endangering the livelihoods of the local population. These measures are being piloted in three areas: the Three Lakes region in Zhejiang province, the Yellow River Delta and the Sanjiang Plain, which is a complex of roughly 59 different large wetlands.

For a long time decision-makers were not so acutely aware of the importance of wetlands for climate protection. Peat bogs store large amounts of carbon and this escapes when the areas are drained. The drainage of bogs therefore contributes significantly to the greenhouse effect. These emissions can be prevented by rehabilitating the bogs. Within the context of Germany's International Protection Initiative, two projects in Turkey and Belarus are concerned with conserving the carbon reserves in peat bogs.

As part of the project in Turkey, which is supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and implemented by GTZ, the Turkish Ministry of Environment and Forestry is developing a peat mining plan. The project records the quantities of peat stored in the bogs, assesses its value for the climate and the economy and sets mining quotas. At the same time, measures for rehabilitating peat bogs are being trialled and made compulsory. These measures are designed to ensure that biological diversity in mining areas is not permanently damaged. Early findings show that a well-planned, careful approach allows new habitats to develop which are used by a wide variety of species. The project in Belarus, which is implemented by KfW, has a similar approach. The project demonstrates how, over an area of 10,000 hectares, rehydration and the sustainable management of degraded bogs can reduce greenhouse gas emissions and increase biodiversity. Suitable methods have been developed to achieve this and these also include appropriate financing mechanisms. In this way it is possible to restore the habitats of endangered plant and animal species across Europe.

Integrated coastal zone management

A quarter of the world's population lives in coastal areas. This enormous population pressure usually causes a high level of environmental pollution in coastal strips. Most coastal inhabitants have to contend with overfishing, ecological crises, and the effects of industrialisation or mass tourism. Almost always, it is a question of short-term profit on the one hand or long-term protection of the environment on the other, exploitation of nature or traditional use rights. Climate change and the rise in global sea levels that accompany it are aggravating the situation. Use of natural coastal resources is only rarely subject to effective regulation and restrictions by the state. Due to the lack of knowledge about the interrelationships between different ecosystems, any measures that are implemented rarely take all aspects into account. Integrated coastal zone management (ICZM) is an approach that seeks to reduce these conflicts, preserve the quality of the environment and promote a balance between the economic, social and ecological concerns involved in coastal development. It is guided by the principle of sustainability. ICZM thus aims to achieve the sustainable use of coastal regions while taking demographic trends into consideration. It involves integrating an interdisciplinary planning and management concept into the structures of the partner country. ICZM is particularly suited to designing regional and supraregional programmes and grouping interventions in coastal regions. In addition to important aspects such as fishing and aquaculture, there are important overlaps between integrated coastal zone management and a number of sectors such as rural and urban development, land use planning, local authority environment management (waste, sewage, water), forestry, promotion of economic development and employment, and tourism.

German development cooperation contributes to ICZM in a number of different countries. For example, GTZ supports its partners on the Adriatic coast of Croatia in getting governmental and non-governmental actors to cooperate on environmental and business issues with a view to reconciling their varying interests. Particular importance is paid to improving links between local and district authorities, while respecting the parameters set by the environment ministry. Development of tourism plays a central role in this.

German development cooperation is also active in ICZM in Viet Nam – in the Mekong Delta, for example, which is extremely important for the entire country. It is regarded as the country's 'rice basket' and farming and sales of aquaculture products – such as shrimps and Tilapia – generate high revenue. But economic growth comes at a price. The mangrove forest belt has been decimated as a result of logging to make way for shrimp and Tilapia farms and

some of the landless population have been driven into the hinterland by investors who see the shrimp business in particular as highly lucrative. The poverty of the coastal inhabitants has contributed to overuse of the remaining mangrove forests.

Natural mangrove forests have very high biodiversity and are extremely important as nurseries, areas of retreat and feeding grounds for many species of tropical fish. But they also provide natural protection against flooding, storm surges and slow coastal erosion. However, only a broad enough strip of species-rich, complex mangrove forest is able to offer resistance to the forces of nature, which are likely to become more powerful in the wake of climate change. That is why mangroves also play a very valuable role in sustainable economic development and poverty reduction.

German development cooperation has been working since 2007 in Soc Trang province in the Mekong Delta to support the provincial government and forestry department in improving management and protection of the mangrove forests. To achieve this, new approaches and mechanisms are being developed. They involve the local population taking responsibility for the protection and sustainable use of the mangrove forests, being included in management decisions and benefiting directly from the profits generated by sustainable use of the coastal zones. New planting methods are being used to re-establish mangrove forests. A comprehensive programme to monitor resource use makes it possible to track precisely whether use of the mangrove forests is causing new damage. Lasting success will only be possible if the population understands the reason behind the protection and sustainable management measures that have been put in place. With this in mind, competitions and other initiatives are being used to raise the environmental awareness of the population, particularly school students and young people.

Tropical forests

Tropical forests play an immeasurable role in biodiversity conservation as approximately 70 % of all terrestrial species are found in these areas. The CBD decision IX/5, which was adopted in 2008 by the 9th Conference of the Parties, strengthens the implementation of the Expanded Programme of Work on Forest Biodiversity. The programme constitutes a broad set of goals, objectives and activities aimed at the conservation of forest biodiversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from using forest genetic resources.

According to World Bank estimates, more than 1.6 billion people depend on tropical forests for their livelihoods. German development cooperation focuses on supporting these groups, especially indigenous people and poor farmers, since they suffer most from forest loss and degradation. The drivers of deforestation are manifold and these include poverty, unsustainable land use and poor governance. In the short term, illegal logging and converting forest areas for other land uses (agriculture, biofuels, settlements, industry and mining) are more profitable than the economic gains derived from the social and ecological services provided by forests. Global deforestation is therefore still continuing at a high rate, with an annual net loss of 7.3 million hectares. Even more concerning is the fact that the majority of forests being lost are in the tropics, where this process has continued unabated over the past few decades.

Deforestation and forest degradation are responsible for approximately one fifth of world greenhouse gas emissions. It will therefore only be possible to stop global warming if tropical forest destruction and degradation is halted. In addition, forest ecosystems have an inherent ability to adapt to changing environmental conditions and they therefore act as a crucial buffer against the effects of climate change, which is especially important for the people living in forests or in close proximity to them. On the

other hand, forests themselves will increasingly require adaptation measures to enable them to cope with an increase in storms, floods, drought, forest fires, pests and diseases.

For these reasons, Germany has considered sustainable forest management and biodiversity conservation a key area of development cooperation for many years. Germany is the second-largest bilateral donor in the forest and biodiversity sector, with annual pledges currently exceeding €200 million (€230 million in 2010) and projected to reach €500 million annually by 2013.

German cooperation concerning forest conservation in tropical countries is embedded in and guided by the international forest policy dialogue. Germany actively participates in the international forest fora founded by the UNFF, UNFCCC, CBD and UNCCD and promotes the implementation of the UN's Non-Legally Binding Instrument on All Types of Forests as a means to foster synergies between international initiatives. Germany makes a substantial contribution to multilateral financing efforts concerning forest protection (GEF, FIP and FCPF of the World Bank, FAO, EU). It supports forest conservation and sustainable forest management projects in 35 countries and within a number of regional organisations as part of its bilateral cooperation programme.

German development cooperation is dedicated to supporting its partners in addressing their commitment to the CBD Programme of Work on Forest Biological Diversity and other international commitments relating to forest conservation. German development cooperation combines capacity building with the development of practical solutions for implementing sustainable forest management and participatory forest policy processes. These include national forest programmes and developing and providing access to sustainable financing mechanisms.

The sustainable management of production forests is particularly important for biodiversity conservation since 90 % of the world's forests are located outside of protected areas. A global biodiversity conservation approach needs to incorporate several important elements, such as the promotion of good forest governance and voluntary forest certification combined with comprehensive planning for sustainable forest production, including wood energy and biofuels. This should always be accompanied by participatory and community-based forest management approaches.

Through the Amazon Region Protected Areas (ARPA) sub-project, German bilateral cooperation participates in the world's largest forest conservation programme. Over the last 15 years, Brazil has established 53 nature reserves covering a total area of 200,000 km² and 99 indigenous territories accounting for an area of more than 380,000 km². Innovative local approaches for sustainable forest management have been put into action in over 500 small-scale projects. They protect the traditional rights of indigenous and local communities and establish partnerships with private companies. This process is developing solid market foundations for the conservation and sustainable management of biological resources. In 2004 the Brazilian Government introduced a new policy to combat deforestation in the Amazon and so far this policy has succeeded in reducing the rate of deforestation by 75 %, from 27,000 km² in 2004 to 7,000 km² in 2009. In order to further boost efforts to curb deforestation, Brazil created the Amazon Fund in 2008. This is an important financial compensation mechanism for reducing emissions from deforestation and degradation. Germany has agreed to contribute €20 million to this fund.

Projects focusing on the conservation and management of tropical forests
(selection of FC and TC projects)

Africa

- Regional Support for the Central African Forests Commission (Congo Basin)
- Climate Change Scenarios for the Congo Basin
- Conservation of Biodiversity and Forest Management (Democratic Republic of Congo)
- Promotion of Renewable Energies, Rural Electrification and Sustainable Supply of Domestic Fuel (Senegal)
- CP - Conservation and Sustainable Use of Natural Resources (Madagascar)

Asia and Pacific

- Management of Natural Resources and Community Forestry (Bangladesh)
- Adaptation to Climate Change in the Pacific Region (Fiji)
- Socio-economic Empowerment of Tribal and Rural Poor and Protection of Natural Resources in Tripura (India)
- Forests and Climate Change Programme (Indonesia)
- Biodiversity Protection through Preparations for Preventing Deforestation (REDD) in the Peat Forests of Merang, South Sumatra (Indonesia)
- Kayan Mentarang National Park Management (Indonesia)
- Information and Knowledge Management for Biodiversity (REDD) in Merang (Indonesia)
- Sustainable Management of Natural Forest and Trade and Marketing of Important Forest Products (Viet Nam)
- Environmental Protection and Management of Natural Resources in the Province of Dak Nong (Viet Nam)
- Supporting Forest-related Ecosystems (Viet Nam)
- Sustainable Development of Coastal Forests in the Province of Bac Lieu (Viet Nam)
- Climate Protection through Avoided Deforestation (CLiPAD) (Lao People's Democratic Republic)
- Programme for Sustainable Management of Natural Resources II (ENRD) (Philippines)
- Adaptation to Climate Change and Biodiversity Conservation (Philippines)
- Modernisation of the National Forest Policy and Piloting REDD-Activities (Philippines)

Latin America

- Protection of Mata Atlântica II (Brazil)
- Supporting Protected Areas of Sustainable Use (Brazil)
- Management and Protection of Natural Resources in Watersheds (Dominican Republic)
- Sustainable Natural Resources Management (GESOREN) (Ecuador)
- Tropical Forest Conservation Morona-Pastaza (Ecuador)
- Tropical Forest Protection (Guyana)
- Promotion of Sustainable Use of Natural Resources and Local Economic Development (PRORENA II) (Honduras)
- Tropical Rainforest Conservation in the Amazon / OTCA
- Reduction of Greenhouse Gases from Deforestation and Forest Degradation in Central America and the Dominican Republic (REDDCARD)

- Tropical Forest Protection and Watershed Management in the Trifinio region (El Salvador, Guatemala and Honduras)
- Sustainable Management of Resources and Supporting Entrepreneurial Competences (Masrenace) (Nicaragua)
- Climate Protection and Conservation of Biodiversity in the Peruvian Tropical Forest (Peru)
- Bi-National Tropical Forest Conservation Programme (Peru)

Reducing emissions from deforestation and forest degradation – REDD

Roughly a fifth of the world's greenhouse gas emissions are caused by the destruction of forests – particularly humid tropical forests, which are rich in carbon. REDD – Reducing Emissions from Deforestation and Forest Degradation – aims to substantially reduce these emissions in developing countries at relatively low cost. The remit of REDD PLUS also includes enhancement of forest carbon stocks – for example, by improved forest management, rehabilitation of forests, and afforestation. While REDD has many innovative aspects, in its practical project work it draws on a wealth of tried-and-tested experience.

German development cooperation and its partners can look back on a number of achievements: they have set up protected areas, strengthened control of illegal logging and fire prevention, issued land titles, and promoted community forest protection and sustainable forestry. Thanks to these pilot programmes, we now know how to make forest protection effective. Forest protection now focuses on areas where we expect forest destruction – both today and in the future. The most important instrument REDD projects have at their disposal are the payments for forest protection services that bring climate-related benefits, i.e. emission reductions. But these benefits must be measurable and verifiable, and that requires special observation through a monitoring system, in effect a kind of carbon accounting scheme.

The roll out of REDD projects takes place in three phases. Phase 1, which is REDD readiness, aims to create the institutional, organisational and legal conditions needed for future performance-based payments for emission reductions in countries rich in forests. Phase 2,

which covers implementation and investment, involves the introduction of national policies designed to promote appropriate structures and local projects that can serve as best practices. Finally, Phase 3 involves performance-based payments that compensate developing countries for proven emission reductions in the form of direct financial transfers. Ideally, these phases should be consecutive; however, in practice they may also be implemented concurrently, since needs and conditions vary from one partner country to another.

An internationally binding framework for the work with REDD does not yet exist. It is currently being negotiated under the United Nations Framework Convention on Climate Change. In this interim phase, international development cooperation has a particularly important role to play. Any involvement with REDD must demonstrate not only a connection with climate policy but also with development policy. REDD will fail unless it involves people at local level and offers them economic alternatives to destructive land use. The establishment of the multilateral Forest Carbon Partnership Facility (FCPF) and other initiatives and the expansion of Germany's bilateral commitment are important steps towards successful protection of forests and the climate. The German Government is working intensively within FCPF to flesh out the mechanism and consolidate it as a platform for mutual learning and innovation.

There are many opportunities for bilateral and multilateral REDD initiatives (especially FCPF initiatives) to complement each other and increase REDD's efficiency. Germany is keen to encourage active collaboration between bilateral and multilateral REDD initiatives, especially in partner countries in which bilateral cooperation over many years has produced a great deal of experience in the forest sector and well-established institutional structures.

Germany's cooperation with many key tropical forest countries is growing rapidly and with it the experience they have acquired together about what works and what does not. BMZ is prioritising bilateral cooperation in its efforts to combine forest protection and climate protection. This commitment is guided by international technical standards, the basic principles of REDD governance and donor coordination, and the involvement of the private sector. In addition to supporting readiness processes, Germany also promotes results-based incentive systems (compensation payments for REDD) and investment in local forest protection schemes. For example, in Central America, Germany is supporting – through a project implemented by GTZ – the efforts of seven countries to develop, test and put into practice a series of coordinated and comparable methods for monitoring deforestation and forest degradation. In Ecuador, KfW is supporting the country's national REDD strategy 'Socio Bosque,' under which land owners and indigenous groups receive compensation payments in return for ceasing forest clearance. A project

GTZ is carrying out in Indonesia involves advising the forestry ministry and a number of provincial administrations in their endeavours to reduce deforestation. The climate-related environment and resource management programme in Laos supports the Ministry of Agriculture and Forestry in its work to implement the country's REDD readiness plan at national and local level. Germany cooperates in these endeavours with the World Bank, the Japan International Cooperation Agency (JICA) and other donors and NGOs. To implement the readiness plans at local level, demonstration activities are taking place in three selected provinces within existing national parks. Here, the partners are trialling investments and financing and incentive mechanisms for innovative and poverty-related REDD activities. The villagers are integrated into this process. They benefit from the support given to land use planning and from the development of concepts for joint management of the national parks. This programme is the first initiative that Laos is specifically supporting with REDD measures at

the implementation level and in doing so it is setting a groundbreaking example. Another example of Germany's involvement is southern Africa: GTZ is advising the Southern African Development Community (SADC) on developing and coordinating an action programme that also aims to reduce greenhouse gases caused by deforestation and forest degradation.

Many challenges still remain. The key challenge is the responsibility of the Framework Convention on Climate Change (UNFCCC): it has to create a legally binding framework for the post-Kyoto period, i.e. after the Protocol has expired. Here it will be particularly important to take into account the social and ecological impact of the future REDD mechanism: at each preparatory and implementation stage of REDD, the people affected, especially indigenous peoples and local communities, must be involved in the process. To create international acceptance and credibility, a system for monitoring, reporting and verifying emission reductions (MRV) is indispensable. A register that would oversee the MRV system and record donors' financial contributions would increase transparency and facilitate donor coordination.

Protecting the tropical forest costs money. International estimates put the cost of reducing destruction of the forest at between 15 and 20 billion US dollars a year for up to 20 years. Bilateral and multilateral efforts on the part of the international community will have to be augmented by private investment. The exact role of the carbon markets in this is still the subject of intense discussion. What is clear, however, is that without the systematic, continual and long-term involvement of the private sector it will be extremely difficult to achieve the ambitious goals set for REDD.

Agrobiodiversity

Agricultural biological diversity – or agrobiodiversity – encompasses all the elements of biological diversity that relate to food and agriculture and that contribute to sustaining the key functions of agro-ecosystems. It focuses on two different aspects: (1) The genetic resources for food and agriculture, including all cultivated and domesticated species, their wild relatives and managed stocks of wild animals and plants, and (2) The components that provide ecological services, for instance, beneficial organisms that control pests, soil organisms that process nutrients for crop plants, pollinators and plants that contribute to controlling erosion or stabilising the water balance.

Agrobiodiversity is the result of thousands of years of effort expended by farmers in selectionand breeding and in developing appropriate production systems and methods. It also provides the source material for further development of crop varieties and animal breeds by farmers and breeders. Small-scale farmers, especially women in Africa, Asia and Latin America, are particularly dependent on the diversity of genetic resources. They face difficult climate conditions and live in marginal locations, for example in dry or upland regions, and they therefore depend on the rich diversity of native plant varieties and locally adapted animal breeds to survive. Climate change and the implications for agriculture have generated discussion on the importance of agrobiodiversity. Agricultural genetic resources have the potential to adjust to changing factors such as heat, drought or salinity, enabling us to cope with the consequences of changing environments

Within the CBD process, the topic of agrobiodiversity was addressed for the first time during the 3rd Conference of the Parties (COP) in 1996. A work programme focusing on this issue was subsequently established and it is composed of four elements (assessments, adaptive management, capacity-building and mainstreaming) and three international initiatives (on pollinators, soil biodiversity and biodiversity for food and nutrition). The 9th COP in 2008 rec-

ognised the contribution of indigenous and local communities to the conservation and sustainable use of biodiversity. The contracting parties were urged to promote opportunities for indigenous and local communities and local stakeholders to participate in the development and implementation of national biodiversity strategies, action plans and programmes for agricultural biodiversity.

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA, adopted in 2001) acknowledges that the future of agriculture depends on international cooperation and on the open exchange of crops and their genes and thus establishes a multilateral system (MLS) to facilitate access to plant genetic resources for food and agriculture and to share the benefits in a fair and equitable way. The benefits arising from the MLS should flow primarily to farmers who conserve and utilise plant genetic resources for food and agriculture in a sustainable manner, especially farmers in developing and transition countries. Although these royalties will only be paid into the fund in the next few years, it was decided in 2009 that projects which conserve food seeds and other genetic material from major crops will receive US$50,000 each to support their efforts. In 2010, 11 innovative projects were selected for funding by the Treaty board from among hundreds of proposals.

The main instrument for the implementation of the Treaty's Multilateral System of Access and Benefit-Sharing is the Standard Material Transfer Agreement (SMTA). Although numerous SMTAs have been concluded, none have so far led to monetary benefit-sharing.

In order to develop concepts and strategies that contribute to reducing the loss of genetic resources for food and agriculture in the long term, GTZ has been implementing a programme for the Sustainable Management of Resources in Agriculture since 2009, which includes a component related to agrobiodiversity. The project helps to raise public awareness of the importance of genetic diversity and Farmers' Rights for food security and poverty reduction. The project provides conceptual advice by evaluating strategies for the sustainable management of resources and also advising development actors on mainstreaming these strategies. Knowledge management is another important component. It supports partner countries in developing suitable agrobiodiversity policies, programmes and strategies in order to implement international agreements (MDG, CBD, ITPGRFA). This is the form of bilateral development cooperation undertaken with China. In addition, it provides support for organising workshops and forums in order to promote awareness and dialogue on key issues relevant to the programme among German and international development cooperation actors. Taking part in thematic discussions and exchanging experiences contributes to improving existing strategies. In June 2010 GTZ co-organised an international conference in Nuremberg focusing on the theme 'Biodiversity – of strategic value in a greening economy' and involving national and international enterprises working in the field of (agro)biodiversity. Several events have been organised in Germany in the context of the International Year of Biodiversity to stress the importance of agricultural biodiversity for sustainable development and food security.

GTZ is also implementing the Farmers' Rights Project, which aims to provide an empirical basis for developing constructive proposals to present to the Governing Body on the realisation of Farmers' Rights as formulated in the International Treaty. The project has established a website, which serves as a tool for decision-makers, practitioners and others involved in the realisation of Farmers' Rights, as well as an information source for researchers and other interested parties. The website is used by over 3000 visitors per month, with particular interest being shown in its database on legislation and policies and its resource section with literature on genetic resources and related issues.

Bilateral cooperation with China

On a bilateral level, Germany supports China in highlighting agrobiodiversity issues. China has a rich biodiversity, but genetic erosion has reached an alarming dimension as a result of increasing social and economic activities. The project (2005-2011) is being implemented by the Chinese Ministry of Agriculture and GTZ and introduces innovative strategies and methods to promote agrobiodiversity and biodiversity-friendly farming practices at village level (in situ) in selected mountain areas in Southern China (Anhui, Chongqing, Hainan, Hubei and Hunan). Administration staff at national, regional and local levels receive intensive capacity building training to improve their advisory skills on the sustainable use and management of biodiversity. Sustainable production systems are being developed and circulated as best practices. By adopting these practices, local farmers can improve their yields and product quality and diversify their production. This contributes to sustainably improving the income, livelihoods and food situation of farmers. In the long term, this will reduce the likelihood of socio-cultural crises. The conclusions drawn from this work provide a basis for advisory support to those making decisions on agrobiodiversity policy at national level. In terms of the socio-cultural impact, the project strengthens communities through activities such as participatory village planning and Farmer Field Schools. In ecological terms, the project is succeeding in conserving agrobiodiversity. Eight upland rice varieties have been revived and there is now greater interest in traditional medicinal plants. The project has therefore also increased the awareness among villagers and other stakeholders of ecology and natural resources as well as traditional knowledge and the cultures of local minority groups. The methodologies applied (participative approach in management, extension and monitoring) have changed partners' attitudes and improved their skills. The project also provides advice to the Chinese Government on complying with various international agreements. In addition, joint Public-Private Partnership (PPP) initiatives with enterprises in Germany are supporting farmers in marketing valuable plants, thus promoting the on-farm conservation of traditional varieties. Additional EU resources are available to enable the geographic scope of the project to be extended and this is important for sustaining local biodiversity. In August 2011 an international workshop will be held on lessons learned from this project in terms of the sustainable use of agrobiodiversity.

Protected areas

Today, legally protected terrestrial ecosystems cover 12.2 % of the Earth's surface and marine protected areas in territorial seas take up 5.9 %. Both these values have increased significantly in the last few decades. In total, there are about 120,000 officially protected areas (PAs) worldwide and they make an important contribution to sustaining global biodiversity. Most of these areas have been established and are managed by local governments. The majority are located in partner countries, meaning that these countries disproportionately contribute to the maintenance of global biodiversity.

There is now far greater recognition of the numerous benefits of protected areas to humankind. Yet there are also several costs associated with protected area management. Facing challenges in many fields of development, partner countries cannot bear this social and financial burden alone. Better financing mechanisms must be identified to secure funding in the long term. Most importantly, the burden must be shared by all beneficiaries. It is now widely accepted that protected areas need to be managed as part of the broader landscape – not as 'conservation islands'. They are in fact intricately linked to their surroundings, not only in ecological terms, but also in relation to various economic, social and cultural aspects. Therefore, the legitimate needs and interests as well as the knowledge and practices of people living in and around protected areas must be taken into account. Experience suggests that protected areas that are not accepted by local people are doomed to failure. Environmental communication and education are helpful tools in this context, however successful protected area management will eventually depend on the full involvement of local people in decision-making and on tangible benefits for those people. A situation in which protected areas constitute an additional burden on often marginalised social groups, rather than a real contribution to local development efforts in poverty-stricken countries, is not only unacceptable from a developmental perspective, but will also considerably limit the chances of success for the long-term conservation and sustainability of protected areas.

Germany's support for protected areas in partner countries is based on this rationale, which underpins all international development efforts. German development cooperation supports and promotes the Programme of Work on Protected Areas (PoWPA), which was adopted by the 7th Conference of the Parties to the Convention on Biological Diversity (CBD). There are four elements to this programme: 1- Direct actions for planning, selecting, establishing, strengthening and managing protected area systems and sites; 2- Governance, participation, equity and benefit sharing; 3- Enabling activities; and 4- Standards, assessment and monitoring. These are associated with about 90 activities, which are each guided by tight implementation timetables. The approach focuses on determining

the design and management structure of protected area systems through a multi-stakeholder process as well as contributing to the harmonisation of sector policies and capacity development at national and regional level. Furthermore, the programme aims to improve the management of protected area systems, especially in the marine environment. German development cooperation supports protected area managers in developing their capacities by providing on-site seminars and training. It is also working with the Secretariat of the Convention on Biological Diversity and other partners to develop and implement an e-learning tool kit, which provides learning stations and advice for all four elements of the PoWPA and their respective activities.

The Peruvian system of protected areas and bio-corridors

Peru ranks amongst the 20 largest nations in the world and has been classified as a megadiverse country – one of the 17 worldwide. It has 84 of the 105 ecological zones on Earth and is home to 10 % of the world's bird species (1,800 species) and more than 20 % of the butterfly species (more than 4,000 species). The Peruvian lowland rainforest, the cloud forest and the northern Peruvian dry forest are well-known biological hotspots. However, Peru has a population of nearly 30 million and almost 35 % live below the poverty line.

Peru currently has 67 natural protected areas, covering almost 15 % of the land. Since the beginning of the 1990s, Germany has been providing financial and technical support to develop environmental policies and conservation strategies. One important pillar is supporting the national system of protected areas and the strengthening of the management capacities of staff. Although faced with many challenges, Peru's system of protected areas currently provides two important opportunities. The first is the creation of the Ministry of the Environment (MINAM) in May 2008 and the subsequent establishment of the National Service for State Protected Areas (SERNANP) and the second is the political mandate to establish regional protected area systems. The creation of the Ministry reflects the increased political weight given to environmental issues and conservation needs in Peru and also the higher levels of societal support for these issues. New administrative capacities and operational guidelines must now be introduced to support this positive development (staffing levels and funds for SERNANP have tripled in just two years). Major organisational challenges have to be met before the transformation from a small supervisory office within the Ministry of Agriculture (the Intendance of Natural Protected Areas) to an entity with technical and administrative autonomy can be considered a success. As part of GTZ's Programme for Sustainable Rural Development (PDRS), the component Protected Areas and Bio-corridors offers guidance and accompanies the rapid growth and expansion of SERNANP. The GTZ team and its partners focus on capacity building for staff at all levels, thus enhancing their ability to confront the many challenges they face.

One of the instruments currently being implemented by GTZ is a detailed toolbox (*caja de herramientas*) which contains relevant education and training material to be used by a variety of actors, such as park rangers. At present, GTZ is also developing a handbook that compiles technical and administrative guidelines for SERNANP staff and other interested personnel. It is structured in the same way as the CBD's Programme of Work on Protected Areas. A joint systematic analysis of the existing legal positions, management concepts and strategies aims to bring to light any inefficient or even contradictory elements of past management practices and also to highlight areas that might require the development of new policies or guidelines. The most important impact expected from this ongoing process of analysis is that the relevant elements of SERNANP policies will become much more widely known. This will promote more efficient and transparent action on the ground and at all other administrative levels. The Organisational Handbook, along with the e-learning toolkit for PoWPA (developed in 2010 by SCBD and several partners, including GTZ), which are

adapted to the social and political needs and realities of the region, will offer a useful range of solutions for the challenges faced by the Peruvian protected areas.

In addition, the national system needs to be consolidated and implemented at sub-national level (both regional and local) to ensure the optimum conservation of animal and plant life and to embed the national protected areas into the broader development context. Integrating systems into the wider land and seascape in this way prevents the formation of conservation islands which are doomed to fail in the long run. Thus, GTZ assessment focuses on establishing regional conservation systems as an outcome of spatial planning processes, that is via Ecological and Economic Zoning (ZEE). Since it was established in 2003, GTZ's Programme for Sustainable Rural Development has contributed to the creation and implementation of 17 protected areas at local and regional level in Cajamarca, Piura and San Martin. These are the programme's priority areas of activity. Furthermore, the amount of public investments dedicated to the conservation of protected areas and natural resources in these regions increased between 2006 and 2009 by about 700 % from US$125,000 to over US$1 million.

The PDRS component Protected Areas and Bio-corridors is closely linked with the programme's other two components, which are oriented towards local economic development and the creation of sustainable income alternatives. These are based on enhancing the value chains of certain nature products ('biotrade'), for example the plants Sacha Inchi (*Plukenetia volubi*) or Tara (*Caesalpinia spinosa*). It is expected that this close interaction between the programme's components will lead to a better economic situation for locals and to a higher quality of life, based on a more sustainable management of the environment – within and beyond the borders of protected areas. These integral conservation and development strategies, along with the participatory tools and instruments, enhance the socio-economic links of the protected areas and contribute towards greater societal acceptance and political support for the long-term conservation of Peru's natural resources and heritage treasures.

The world network of Biosphere Reserves and World Heritage Sites

The United Nations Educational, Scientific and Cultural Organization (UNESCO) hosts the Secretariats of two complementary concepts and intergovernmental instruments to assist countries in their efforts to conserve cultural and natural heritage. These are the World Network of Biosphere Reserves and the system of World Heritage Sites under the World Heritage Convention. Biosphere Reserves are sites recognised under UNESCO's Man and the Biosphere Programme (MAB) set up to innovate and demonstrate approaches to conservation and sustainable development. The objective is to achieve a balance between the often conflicting goals of conserving biodiversity and promoting human development while maintaining associated cultural values. These reserves are of course under national sovereign jurisdiction, yet share their experience and ideas nationally, regionally and internationally within the World Network of Biosphere Reserves. There are 564 sites worldwide in 109 countries.

Under the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted in 1972, cultural and/or natural sites of outstanding universal value can be inscribed on the World Heritage List. It is also

the first international legal instrument to protect cultural landscapes. The list covers 890 properties forming part of the cultural and natural heritage, which the World Heritage Committee considers as having outstanding universal value. These comprise 689 cultural, 176 natural and 25 mixed properties in 148 State Parties. To ensure that the World Heritage List reflects the world's natural diversity, the objective is to inscribe well-managed protected areas, which are the world's most valuable places in terms of landscape beauty, earth science, ecosystems and biodiversity. Through its Secretariat - the World Heritage Centre - the Convention offers assistance to State Parties for the preparation of site nominations as well as for the improvement of site management. The International Union for Conservation of Nature (IUCN) is the advisory body for the World Heritage Committee and has a key role in evaluating new nominations and monitoring existing sites.

The German Government assists partner countries in tailoring these concepts and instruments to their specific contexts in order to conserve and make sustainable use of their natural and cultural heritage. All the projects cooperate closely with people living in and around the protected areas and attempt to reduce any adverse human impact on nature. They also aim to create benefits for local communities from using biodiversity in a sustainable way.

Germany therefore supports World Heritage Sites on the basis of bilateral agreements with its partner countries, mostly in the form of long-term support. Altogether, some 30 Biosphere Reserves and World Heritage Sites have been supported since 1977. The majority of projects are dedicated exclusively to a particular site, but some projects deal with Biosphere Reserves and World Heritage Sites as an integral part of more comprehensive programmes, such as support to national protected area systems. At present, there are approximately twelve ongoing comprehensive projects involving Biosphere Reserves and World Heritage Sites and some of these have lasted for 10-15 years or more.

The activities supported by German development cooperation range from small-scale measures such as feasibility studies for the establishment of Biosphere Reserves on the one hand, to long-term collaboration on the other. The most significant undertaking is without doubt supporting the conservation and sustainable management of the Mata Atlântica in Brazil, one of the world's largest Biosphere Reserves. It comprises over 29 million hectares and almost 100 million people live within its boundaries. Within the context of the Pilot Programme to Conserve the Brazilian Rainforest (PPG7), Germany has been supporting the Brazilian state government authorities since the mid-1990s in protecting this pioneer of Brazilian Biosphere Reserves with a series of different projects, mainly through Financial Cooperation. The German overall commitment to the protection of Mata Atlântica is almost €50 million. Other large-scale projects supported by Germany include those dedicated to the conservation of the Selous Wildlife Reserve in Tanzania (more than €27 million since 1988), the Tai National Park in Côte d'Ivoire (more than €35 million since 1990) and the Pendjari National Park (more than €15 million since 1998).

In 2008, the GTZ initiated and supported an innovative partnership between the Kruger to Canyons (K2C) Biosphere Reserve in South Africa and the Rhoen Biosphere in Germany as a new form of capacity development. Based on exchange visits covering a wide range of topics (including, but not limited to, renewable energies, good governance and public private partnership), projects were developed and the exchange of lessons learned was encouraged. This partnership, co-funded by the German Federal Agency for Nature Conservation (BfN), was presented and highlighted by UNESCO during an official side event at the 9th Conference of the Parties (COP 9) to the Convention on Biological Diversity (CBD) in May 2008 in Bonn.

To promote new and responsible ways of bringing together conservation and development interests, GTZ has joined forces with the

Selection of Biosphere Reserves and World Heritage Sites supported by the German Government. BR = Biosphere Reserve; WHS = World Heritage Site; IA = Implementation organisation on behalf of the German Government; ongo. = ongoing; compl. = completed..

Country	Site name	BR	WHS	IA	Ongo.	Compl.
Africa						
Benin	Pendjari National Park	1986		GTZ, KfW	●	
Côte d'Ivoire	Taï National Park	1977	1982	GTZ, KfW	●	
	Comoë National Park	1983	1983	GTZ		●
Congo (DR)	Kahuzi-Biega National Park		1980	GTZ	●	
Mauritania	Banc d'Arguin		1989	GTZ	●	
Morocco	Arganeraie	1998		GTZ		●
	Oasis du sud marocain	2000		GTZ		●
Senegal	Djoudj National Bird Sanctuary		1981	GTZ		●
South Africa	Waterberg	2001		GTZ		●
	Kruger to Canyons (K2C)	2001		GTZ		●
Tanzania	Selous Game Reserve		1982	GTZ, KfW	●	
Asia						
Kyrgyzstan	Issyk-Kul Biosphere Reserve	2001		GTZ		●
Viet Nam	Phong Nha-Ke Bang Nationalpark		2003	GTZ, KfW	●	
Latin America						
Brazil	Mata Atlântica	1993		GTZ, KfW	●	
	Central Amazon	2001		DED	●	
Bolivia	Noël Kempf National Park		2000	CIM		●
Colombia	Sierra Nevada de St. Marta	1979		GTZ		●
Dominican Republic	Jaragua-Bahoruco-Enriquillo	2002	–	KfW	●	
Ecuador	Sumaco	2000		DED, GTZ, KfW	●	
Guatemala	Maya (incl. Tikal National Park)	1990	1979	GTZ, KfW		●
Honduras	Rio Plátano Biosphere Reserve	1980	1982	GTZ, KfW	●	
Nicaragua	Bosawas	1997		GTZ, KfW	●	
Peru	Santuario histórico de Machu Picchu		1983	GTZ	●	
	Noroeste	1977		GTZ, KfW	●	
	Parque Nacional Huascarán	1977	1985	GTZ, KfW	●	
	Parque Nacional de Manú	1977	1987	GTZ	●	
	Parque Nacional del Río Abiseo		1990	GTZ, KfW	●	
	Líneas y geoglifos de Nazca y de Pampas de Jumana		1994	GTZ	●	

Secretariat of the CBD, IUCN and the UNESCO World Heritage Centre in a communication initiative. Natural World Heritage Sites are emblematic and visible 'flagships' of nature conservation, which transcend national borders, generational or sector-specific boundaries and individual interests. This supports the strengthening of the joint responsibility of humankind.

The international youth forum Go4Biodiv World Heritage Sites will be held during the 10th Conference of the Parties (COP 10) to the CBD in Nagoya, Japan in 2010. It invites young people from selected natural World Heritage Sites to come together to share their experience and ideas and articulate a clear message to governmental representatives and the media. Their input into the decision-making process may become crucial for the development of a strong voice for young people in international negotiations. All participants will contribute with their creativity and thoughts to a colourful exhibition entitled Our Treasures at Risk - World Heritage Sites in times of Climate Change. They will

present their specific sites and their personal connection to it, for example as indigenous farmers, park wardens, scientists or nut gatherers. They will also fill a huge Japanese 'treasure box' with natural and cultural gifts from their World Heritage Site, thus showing that they value the specific spiritual and natural services these outstanding places deliver to humankind. The young delegates will prepare their creative messages to COP 10 and the international community in a camp bringing them in close contact with nature at the foot of Mount Fuji, an iconic volcano and important candidate for World Heritage status in Japan. After COP 10 the colourful exhibition will travel to different places around the world as a 'messenger' of natural treasures and the global responsibility for their conservation.

Governance of protected areas

Most protected areas in the world have people residing within their boundaries or surrounding communities depend on them for their livelihoods. Conventional management approaches tend to see people and nature as separate entities. This has come at a considerable social cost, mainly to local communities, many of which are amongst the poorest within their societies. Consequently, more integrated approaches to conservation and resource use have been promoted in recent years. Today, most conservationists and planners consider the inclusion of governance aspects in projects as essential for the protection of biodiversity and the sustainable and equitable use of natural resources.

Governance affects the achievement of relevant management objectives (effectiveness), the sharing of costs and benefits (equity) and the generation of income and subsistence for communities, as well as political and financial support for the sound management of natural resources. Settings can change dramatically when those governing protected areas or biodiversity conservation become more open to pluralism and recognise multiple interests and values in society.

In its Programme of Work on Protected Areas (PoWPA), the Convention on Biological Diversity (CBD) has included a specific element focusing on Governance, Equity, Participation and Benefit Sharing. It calls for the active involvement of indigenous peoples, local communities and relevant stakeholders in the planning phase and management of protected areas and aims for the equitable sharing of both the costs and the benefits of managing such areas, preferably using the conservation benefits to reduce poverty. The PoWPA also suggests that parties should promote and include a broad set of protected areas governance types in their national protected areas systems. The International Union for Conservation of Nature (IUCN) recognises four generic types of governance, all of which can be associated with any management objective for protected areas. These are: (1) Governance by government, (2) Shared governance, (3) Private governance and (4) Governance by indigenous peoples and local communities. Today, the shared governance of protected areas as well as exclusive governance by indigenous peoples, local communities or other non-state actors is seen as an important means of achieving more equitable and effective conservation in the context of global change.

Shared governance, sometimes also referred to as co-management, comes in many forms. In 'collaborative' management, decision-making and responsibility rest with one agency, but this agency is required to inform or consult with other stakeholders. In 'joint' management, various actors sit together on a management board with decision-making authority and responsibility. German development cooperation has been involved in the shared governance of natural resources for a long time – especially in the Congo Basin and in Central America, but also in southern Africa and Asia – where the empowerment of local communities has played an important role. Networks of co-management have been established in collaboration with IUCN and other partners. New participatory components have been introduced into many bilateral or regional projects, such as the management of the Cerro Hoya National Park and

its surrounding zones in Panama, the Kruger National Park in South Africa, the Banc d'Arguin National Parc in Mauritania, the Pendjari National Park in Benin, as well as in several Mongolian and Vietnamese protected areas, and the Central American bio-corridor initiative. Each of these has its own specific challenges.

In recent years, the concept of Indigenous and Community Conserved Areas (ICCAs) has emerged strongly in governance discussions. The thousands of ICCAs that exist throughout the world include sacred forests, lakes and landscapes, wetlands, catchment forests, coastal and marine areas, as well as indigenous peoples' territories. Although most of them (still) share the fate of being neglected or not recognised in official policies or systems, their conservation history is often much older than that of government-managed protected areas. Increasingly, however, ICCAs and their role in biodiversity conservation are being officially recognised and some governments have integrated them into their national protected area systems. Recently, German development cooperation has started to explore ICCAs as a means of enhancing ownership of ecosystems and resource management at local level. Several ICCAs have already been supported, for example through the establishment of payment schemes for ecosystem services or support for the demarcation of indigenous territories.

In the light of decentralisation and democratisation processes in Latin America, the Biodiversity Task Force within the group of German development cooperation experts in Latin America and the Caribbean started an initiative in 2006 focusing on Municipal Conserved Areas. The initial results from this extensive survey, which includes 15 countries in the region, were presented and discussed during the 2nd Latin American Congress on Protected Areas.

Sharing benefits and improving governance: the Pendjari Biosphere Reserve

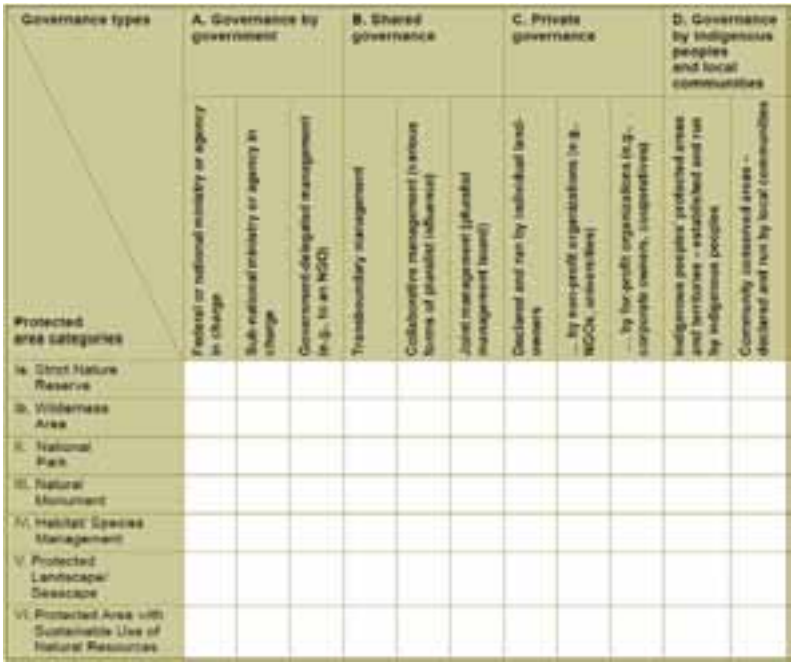
In the Pendjari National Park in north-western Benin, one of the most biodiverse savannah landscapes in West Africa, governance has been greatly improved with the assistance of German development cooperation. This successful initiative has resulted in more equitable decision-making, enhanced sharing of benefits and ultimately in better acceptance of biodiversity conservation in the area.

The objectives of the Pendjari Park, which was recognised in 1986 by UNESCO as a Biosphere Reserve, are to maintain its high biological diversity while allowing local communities to make use of the economic potential of the area and to distribute the generated profits in a fair and equitable manner. This increases the income of the local population and reduces the incentives for land seizures, illegal deforestation and poaching. Safari-hunting tourism for international visitors is now the area's financial backbone, generating high incomes for local communities and institutions. Hunting is strictly controlled and scientifically monitored. The wildlife populations are not at risk as special hunting areas have been identified and only selective hunting is permitted. In addition to hunting tourism, about 130 full-time positions in the park and its surrounding areas have been created as well as hundreds of short-time jobs especially for surveillance on the reserve.

The Village Associations for Wildlife Reserve Management (AVIGREF) are responsible for the management of the 'controlled occupied zone', which surrounds the hunting areas and is delimitated for local village activities. The AVIGREFs also receive 30 % of the income generated through activities in the hunting areas. The Union of the AVIGREFs represents the interests of the villages in various park management institutions. Local communities have thus obtained more power in the decision-making process and this increases their opportunities to benefit from the resources in the area. Overall, biodiversity conservation in the area has improved significantly and rates of acceptance of the park among the local communities have increased to over 80 %.

Supporting the demarcation of Indigenous Peoples Territories in the Amazon

Indigenous Territories cover about 100 million hectares of the Brazilian Amazon. Satellite images have proven that these territories are just as effective as uninhabited forest reserves in halting deforestation and preserving the natural habitat. German development cooperation has supported the demarcation of these territories since 1995. The Brazilian Constitution of 1988 forms the legal basis for the recognition of indigenous rights and the state is responsible for the demarcation and protection of indigenous territories. Initially, however, the process was only advancing very slowly. The German project has helped the state body in charge of indigenous affairs (FUNAI) to improve the efficiency and transparency of the demarcation process and has successfully involved more of the indigenous communities concerned. In total, 37.7 million hectares of territories had been legally recognised by the end of 2006. The increased participation of indigenous peoples in the process has resulted in a significant reduction in demarcation errors and increased the awareness of indigenous communities of their territories and boundaries. The project has also supported the monitoring and supervision of territories by providing technology such as radio communications and by facilitating agreements within communities on how to react in the case of encroachments. The capacities of several indigenous organisations have also been developed. The project has shown that this kind of support can allow communities to become more independent with regards to controlling and safeguarding their territories and that it can reduce the instances of encroachment from the outside. Alongside these 'new' responsibilities, however, comes the need for stronger collaboration with the state institutions responsible for territorial control in order to ensure the long-term protection of the demarcated territories. An important requirement for this is joint territorial planning, which also takes into account areas adjacent to indigenous territories.



The IUCN protected area matrix: a classification system for protected areas comprising both management category and governance type.

Cooperation with civil society

German development cooperation normally works on the basis of bilateral agreements with partner governments. Nevertheless, cooperation is also sought with various civil society groups, notably non-governmental organisations (NGOs), whenever this is feasible and necessary to support the development processes. In one form or another, the majority of biodiversity projects cooperate with national and local NGOs, for example by including them in the planning process of a project, by assigning them certain tasks or by inviting them to participate in project steering committees. The participation of civil society is an important element in enhancing the success of the projects. Given the considerable variety of NGOs and their stakes in biodiversity cooperation, it is difficult to draw general conclusions about their involvement. On the whole, cooperation arrangements with NGOs are entered into under very specific circumstances. However, the objective is always to achieve synergies and mutually enhance the effectiveness of a project. The key benefits of cooperation with NGOs are:

- Their thematic and/or geographic focus;
- Their presence on site and/or long-standing experience;
- Their complementary capacities in terms of professional staff and/or resources.

Based on these strengths, the key advantages for development cooperation interventions lie in a swifter, more focused identification and preparation of projects. NGOs have also frequently proven to be valuable partners in delivering inputs during implementation itself – such as providing site-based capacity building as well as mobilising additional physical and financial resources. Moreover, the presence of reputable NGOs in a project can lead to additional support by third parties. Developing a partnership with an experienced NGO before and during the closure of project interventions may also help to achieve sustainability and the long-term continuation of measures.

From an NGO point of view, cooperation with donors can help promote a development-oriented, socio-economic perspective, which can help broaden the outlook towards more holistic and integrated approaches. This, in turn may enhance ownership in the intervention area(s) as well as at the official partners level in the country, leading to a higher degree of recognition of the NGO's work. Further potential lies in being able to up-scale previously localised and site-based approaches with the help of development cooperation partners, thus enhancing their effectiveness and geographical reach.

NGOs are most commonly involved in projects or programmes as implementation partners or co-financiers. On several occasions, the German implementing agencies GTZ and KfW have, following the agreement of partner governments, drawn on the capacities of NGOs during project preparation and implementation. This cooperation may apply to an entire project, or only to certain components.

In the case of KfW, this cooperation – which in many cases is supported by a broad empirical basis in the field – has evolved over time into inter-institutional Memoranda of Cooperation of a more general nature. KfW has concluded memoranda with a number of organisations, including the World Wide Fund for Nature (WWF) in 2004 and Conservation International (CI) in 2006. Some successful examples of cooperation with NGOs are the Amazon Region Protected Areas (ARPA) Programme in Brazil, co-financed by German financial cooperation, WWF and World Bank/Global Environment Facility (GEF); the Caucasus Protected Areas Fund (CPAF) co-financed by CI, German financial cooperation and WWF; the Foundation for Protected Areas and Biodiversity (FAPB) in Madagascar, co-financed by the French agency AfD, CI, German financial cooperation, WWF and World Bank/GEF. In addition to 'site-

based' cooperation, joint approaches may also cover cross-cutting themes of common interest, for example conservation finance or protected area management approaches. One prominent example is the Rapid Review of Conservation Trust Funds – a joint effort initiated in 2008 by WWF, CI together with AfD and KfW.

Within the framework of human resources cooperation, the Centre for International Migration and Development (CIM) and the German Development Service (DED) have seconded a number of experts directly to NGOs and private foundations. These experts usually work with the organisations for a number of years and help them build their capacities. Examples include experts placed with the Foundation for the Preservation of Wildlife and Cultural Assets in Armenia, with the Association for the Conservation of Biodiversity (ACBK) in Kazakhstan, a wildlife expert with the NGO Nature Protection Team in Tajikistan and various experts with West Africa Primate Conservation Action (WAPCA), Namibia Nature Foundation (NNF), Association pour la protection de l'environnement et la promotion de l'agriculture (Association for the Protection of the Environment and the Promotion of Agriculture) in Rwanda and the Friends of Nature Foundation (FAN) in Bolivia. Human resources cooperation support is also provided to international NGOs such as the International Union for Conservation of Nature (IUCN) Office in Ecuador or the WWF Caucasus Office in Georgia.

The BMZ Funds-In-Trust (FIT) projects are a special tool to support international NGOs and UN institutions directly, in addition to bilateral agreements at government level. These projects include among others Catalyzing action and enhancing synergies in the implementation of biodiversity obligations: focus on interface between biodiversity and climate change nationally and on adaptation internationally (IUCN), strengthening capacity for effective implementation of payments for watershed services providing equitable benefits to local communities in the Congo Basin (WWF), setting an example for marine protected area effectiveness in the West African marine ecoregion (WWF), and supporting the implementation of an international forest treaty (FAO).

Regional approaches

It is becoming increasingly clear that the effects of the loss of biological diversity are transnational. For this reason, it is now getting more and more common for several countries from a region to come together to develop joint approaches. This should help to conserve transboundary ecosystems and coordinate the necessary policies and legal framework. There are several benefits of having regional processes for implementing the Convention on Biological Diversity (CBD). (1) They can establish a common understanding between countries on issues relating to biological diversity. In this way they can support the countries involved in interpreting at national level the measures adopted in international negotiations and in introducing the necessary steps to implement them. (2) By encouraging an exchange of information, experiences and expertise, they can build synergies between countries. (3) Regional communities can develop more political and economic influence than individual countries by bundling their members' interests. This means that, at international summits, regional positions can often be negotiated more effectively than those of individual countries. (4) Last but not least, they also help to reduce conflict by providing positive experiences of cooperation. However, there are just as many challenges as benefits for regional processes and communities. These include strengthening regional organisations and structures, both politically and institutionally, so that they are able to support their member states in implementing regional and international resolutions. In order to achieve this, the countries must give the organisation a mandate to examine, evaluate and report on how member states are fulfilling their regional and international duties. It is also essential to guarantee that the interests of every group are represented. In addition, biodiversity issues should not be discussed just by the environmental sector, but by all those that impact on or profit from biodiversity, such as the business, mining and agricultural sectors.

There is no longer any doubt that regional approaches can help support national initiatives and international conventions. However, they are not a replacement for national and global engagement. Only cooperation between all three levels can halt the loss of biodiversity. German development cooperation is therefore supporting regional activities and innovative regional partnerships for the conservation and sustainable management of biodiversity. The German Government is promoting trans-

boundary approaches in various regions across the world.

For example, Germany is one of the few donor countries offering support and advisory services to the three major organisations responsible for promoting sustainable forest management. These are the Amazon Cooperation Treaty Organization (ACTO), the Central African Forests Commission (COMIFAC) and the Association of Southeast Asian Nations (ASEAN). In the Amazon Basin, ACTO supports its members in sustainably implementing the CBD. With German assistance, ACTO organises the Amazonian countries' participation in CBD Conferences of the Parties. It has also developed a regional strategy for the conservation and sustainable use of biodiversity in the Amazon Basin. This provides solutions to transboundary problems in the Amazon region, for example introducing regional criteria and indicators for sustainable use and commercialisation (biotrade) and establishing a system to control the illegal trade in wild animals and plants. One of the biggest challenges is how to involve civil society, the private sector and indigenous community stakeholders in making strategic decisions about natural resources. However, this process can be a great success and the Congo Basin is a good example of this.

Germany promotes voluntary multi-stakeholder partnerships which aim to coordinate international support for the implementation of regional policies. For instance, Germany is represented in the Congo Basin Forest Partnership (CBFP), which was launched at the 2002 World Summit on Sustainable Development in Johannesburg. The CBFP is a non-legally binding partnership that has the objective of enhancing the effectiveness of partners' projects and programmes in the field of conservation and sustainable management of forest ecosystems, economic growth and poverty reduction in Central Africa. Today, CBFP constitutes a network of 53 members. Since the partnership was founded, considerable progress has been made in sustainable forest management in the Congo Basin. Several transboundary national parks have been established, including the Tri-Dom National Park, comprising 7.5 % of the Congo Basin rainforests, the Dzanga-Sangha Tri-National Park, now financed through a multilateral fund, the Sena Oura-Bouba Ndida cross-border protected area between Chad and Cameroon and the Mayombe Forest. Outside of the protected areas, some 4.5 million hectares of production forests have now been FSC-certified, making the Congo Basin the largest natural certified forest block in the world to be certified. Germany has also supported the fight against illegal logging and the timber trade in the region. Following extensive dialogue with the European Commission, Cameroon has concluded negotiations for a voluntary partnership agreement (VPA) with the European Union, committing itself to setting up a national timber tracking and legality assurance system. All other forest countries in the region (the Democratic Republic of Congo, Congo, the Central African Republic and Gabon) have since followed this example and two of these countries have already signed an agreement.

Germany is also supporting the Association of Southeast Asian Nations (ASEAN) in implementing the ASEAN Vision 2020. The objective is for the member states to agree on common rules and measures for solving transboundary environmental problems.

Within the context of the South-South Cooperation promoted by the CBD, German development cooperation is supporting an exchange of experiences to facilitate learning among the regional organisations that are engaged in sustainable forest management and biodiversity conservation. The project focuses on the three largest global forest regions and provides support to ACTO, COMIFAC and ASEAN. The objective of the cooperation is to foster a more effective and efficient implementation of the approaches and instruments adopted by international forest and environmental agreements and also to organise dialogue fora. The aim is to support sustainable development and poverty alleviation at regional as well as national and local level.

Table: Examples of regional approaches in biodiversity management supported by German development cooperation. IA = Implementing Agency.

Region	Participating countries	Subject	IA
Central Asia	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	Natural Resource Management	GTZ
South Caucasus	Armenia, Azerbaijan, Georgia	Ecoregional Conservation Programme	CIM, GTZ, KfW
MENA (Middle East and North Africa)	Morocco, Tunisia, Algeria, Syria, Lebanon, Turkey	Adaption of Forest Policies to Climate Change	GTZ
SADC Region	SADC countries, focus on Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia, etc.	Sustainable Forest Management	GTZ, KfW
COMIFAC	10 Central African states (Burundi, Cameroon, Central African Republic, Chad, the Congo, the Democratic Republic of Congo, Gabon, Equatorial Guinea, Rwanda, Sao Tomé & Principe)	Regional support to COMIFAC, a subregional intergovernmental organisation	GTZ, KfW
ASEAN	Association of Southeast Asian Nations (ASEAN countries)	Biodiversity Centre (Biodiversity and Climate Change) / Implementation of the ASEAN Vision 2020	GTZ
South-East Asia	Association of Southeast Asian Nations (ASEAN countries)	Regional Forest Programme South-east Asia	GTZ
ACTO	Amazon Cooperation Treaty Organization: Organização do Tratado de Cooperação Amazônica (OTCA/ACTO).	Tropical Forest Conservation in Amazonia	GTZ

Financing biodiversity conservation: trust funds and debt-for-nature swaps

The financial sustainability of biodiversity-related interventions has often proven to be a crucial bottleneck. Economically speaking, ecosystem services (such as water retention, climate regulation and biological diversity) constitute public goods that do not have prices and markets. In practice – and particularly in the short-term – their 'productivity' cannot compete economically with other, less sustainable forms of land use, especially as external costs are not being considered. In particular, this applies to the *in situ* conservation of ecologically valuable landscapes that are the primary source of biodiversity. Concerning those landscapes, a classical distinction applies in terms of tenure and objective: the majority of ecosystem conservation on public land takes place through protected areas, with a clear focus on protection; approaches to conserve natural ecosystems on private or communal lands, however, are expected to deliver immediate socio-economic benefits – e.g. sustainable small-holder forestry, soil conservation, or clean water supply among others.

'Classical' project or programme support – which is provided within the framework of German development cooperation – is well-suited to promoting biodiversity conservation in terms of capacity development, equipment and infrastructure. However, particularly in the case of protected areas, obtaining long-term funding to allow schemes to continue after project support is phased out remains a challenge.

One option for resolving the issue of financial constraints is raising revenue through the protected area itself (e.g. gate fees or ecotourism). In many cases, however, these funding sources are normally insufficient to cover long-term management expenditure, leaving a gap that needs to be filled by external financing. The provision of additional funding is consistent with the general recognition of the need to pro-

tect natural ecosystems and biological diversity as a global public good. As such, their conservation is not just the sole responsibility of individual countries, but requires a global collective effort. Following this logic, 'trust funds' have become a popular remedy to address conservation finance needs – especially in the form of 'endowments'.

Trust or endowment funds leave the capital stock itself untouched (ideally in 'real terms', i.e. retaining a buffer to compensate for annual inflation) and only utilise interest gains to finance conservation operations, to date mostly in and around protected areas. By design, they are open to contributions from different sources (public or private donors, debt swaps, designated revenue, etc.), but apply unified administrative procedures and therefore operate in line with the increasing demand for donor coordination and harmonisation. Until recently, however, German public budgetary regulations would not permit direct support to such financial mechanisms.

Trust funds were officially introduced and acknowledged as an instrument of German cooperation in 2007. Within the last few years, various endowment funds (for example, the Amazon Region Protected Areas (ARPA) programme in Brazil and other projects in Cameroon, Caucasus and Madagascar) have received direct support from German financial cooperation and further assistance is on the agenda (for Benin, Guyana and Honduras). In addition, such instruments have also been applied in the framework of 'debt-for-nature swaps' (e.g. in Ecuador). It is, however, still too early to quantify the impact that this financial support has had on conservation. In order to operationalise the approach, a number of comparative analyses on trust funds have been conducted jointly by Agence Française de Développement (AfD), Conservation International (CI), World Wide Fund for Nature (WWF) and KfW. For the benefit of German financial cooperation, KfW is using the results of this study to create an operations manual.

There are several preconditions focusing on governance and transparency that should be fulfilled before German support is provided for endowment mechanisms:

- transparent administration and supervisory structures incorporating civil society;
- clear, prioritised criteria (including measurable performance indicators) for distributing endowment proceeds to protected areas;
- functioning management structures and mechanisms in the respective 'target areas' involving key local stakeholders;
- resources to be accessed on the basis of (preferably performance-oriented) management and planning documents, to be verified *ex post* according to agreed indicators;
- adequate local contributions (in kind or financial) to complement funding support;
- functioning mechanisms for resolving conflicts with the local population (stakeholders);
- sound financial management.

Special care must be taken to design trust funds on a 'subsidiary' basis, without discouraging the country's own efforts to mobilise additional resources at local or national level. Particularly in the case of newly established funds, an equally high degree of attention and diligence is needed when setting up the mechanisms for periodically requesting and allocating financial resources. This should be carried out on the basis of targeted planning and systematic monitoring.

In a broader context, due to their focus on participation and transparency, trust funds can play an important role in improving governance conditions in their specific sector, and sometimes even beyond it.

In summary, trust funds offer transparent, accountable and multi-stakeholder mechanisms for mobilising and administering large amounts of funding – thus constituting an important and

effective instrument to ensure the long-term protection of high-value natural ecosystems. They can provide long-term and sustainable conservation finance and ensure that a degree of control over the allocation of funds remains with local stakeholders. On the other hand, they are complex instruments to negotiate, set up and administer. They also require elaborate legal and institutional structures and strong technical capacities. Therefore, their operation is most effective if they are combined with other conservation and management approaches and instruments.

The Conservation Finance Alliance (CFA) was founded in 2002 as a platform for sustainable conservation finance to tackle the various challenges in this field. The CFA is an alliance of non-governmental, multilateral, governmental and private organisations with an interest in promoting the issue in the international arena (see www.conservationfinance.org). It has developed into an important forum for networking and information exchange. Among other things, it has addressed the topic at the Conference of the Parties to the CBD, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), the World Parks Congress and other international events. Both the GTZ and KfW are active members of the CFA.

Debt-for-nature Swaps (DfN)

Funding volume is given in million Euro.

Country	Project	Beneficiary	Term	Funding	Mod.
Bolivia	Forestry School Cochabamba and Ecological Institute La Paz	FUNDECO (NGO)	1993-2004	4.24	FC
	Funding of an environmental laboratory/support for university education ("Master in Ecology")	FUNDECO (NGO)	1997-2005	10.23	FC
	Sistema Nacional de Areas Protegidas	Servicio Nacional de Areas Protegidas, SERNAP	1995-2009	17.90	FC
Ecuador	Protected Areas System (Swap V, VII, VIII)	FAN (National Environmental Fund) and Ministry of Environment	2008 2003 2007	V: 3.24 VII: 3.16 VIII: 0.76	EnF
	Forest Protection Gran Sumaco (Swap VI)		2003	VI: 3.20	EnF
Honduras	Protection of the Rio Plátano Biosphere Reserve	Corp. Hondureña de Desarrollo Forestal	2000-2002	0.56	FC
Indonesia	Debt swap III	Sumatra National Parks Support (Bukit Barisan Selatan; Gunung, Leuser; Kerinci Seblat National Parks)	in prep.	6.25	FC
Côte d'Ivoire	Sustainable Funding of Tai National Park	FPRCI / Fondation des Parcs et Reserves en Côte d'Ivoire	in prep.	9.30	FC + EnF
Peru	SINAPE (I and II)	PROFONANPE (Foundation for National Parks and Protected Areas) and INRENA	1994-2004 2000	I: 4.60 II: 2.04	FC + EnF
	Nature Resources Management Morona-Pastaza	The Peru-Ecuador Binational Fund for Peace and Development	2000	7.55	EnF
	Alternative Development Tocache Uchiza	DEVIDA (Comisión Nacional de Desarrollo y Vida Sin Drogas – National Drug Agency)	2001-2008	12.27	FC
	Alternative Development and conservation forests Alto Mayo	Region San Martín Proyecto Especial Alto Mayo (PEAM)	2000-2005	2.04	FC
Philippines	Quirino Forestry Programme	Department of Natural Resources and Environment (DENR) and Province of Quirino	1994-2003	1.98	FC

Mod. = modality; EnF = Endowment Fund; FC = Financial Cooperation

Trust Funds (Endowment Funds)

Funding volume is given in million Euro. DfN = Debt-for-nature Swap.

Name of Fund	Country	Purpose	Funding Volume	Fund. Source
Caucasus Protected Areas Fund	Armenia, Azerbaijan, Georgia	Protected Areas Management	5.00	FC
Fundo Brasileiro para Biodiversidade (FUNBIO)	Brazil	Protected Areas Management	10.00	FC
Fonds Tri-National du Sangha (TNS)	Cameroon	Support to Lobeke National Park / TNS	5.00	FC
FPRCI/ Fondation des Parcs et Reserves en Côte d'Ivoire	Côte d'Ivoire	Support to Tai National Park	4.00	DfN
FAN (National Environmental Fund)	Ecuador	Protected Areas System (Swap V, VII, VIII)	V: 3.24 VII: 3.16 VIII: 0.76	DfN
	Ecuador	Forest Protection Gran Sumaco	VI: 3.20	DfN
Galapagos Invasive Species Fund (FEIG)	Ecuador	Eradication of invasive species	2.50	FC
Guyana Conservation Trust Fund	Guyana	Tropical Forest Protection	4.00 (in prep.)	FC
Madagasy Nature Conservation Fund	Madagascar	Nature conservation	5.00	FC
PROFONANPE (Fondo Nacional para Áreas Naturales Protegidas por el Estado = National Fund for Protected Areas)	Peru	Conservation Areas	9.50 (in 2 tranches)	FC
	Peru	Bi-National Tropical Forest Conservation Programme	2.50	FC
	Peru	Protected Areas System (SINAPE I + II)	I: 4.60 II: 2.04	DfN
The Peru-Ecuador Binational Fund for Peace and Development	Peru / Ecuador	Nature Resources Management Morona-Pastaza	7.55	DfN

Payments for ecosystem services

Financing and management of protected areas has historically been perceived as the responsibility of the public sector, which has also borne the costs of conservation by implementing specific measures, usually in the form of command and control regulations. However, with dwindling resources available for conservation and disillusionment over the ineffectiveness and inefficiency of traditional policy instruments, the interest in alternative approaches is growing. Many of them take into account the costs of management, but few include the cost to the local population of conservation, caused, for example, by lost agricultural revenue. This particularly affects the poorest sectors of the population. New market-based instruments are now being explored, with the result that the services provided by ecosystems are being recognised and the need to foster synergies between conservation and development is being acknowledged. Payments for ecosystem services (PES) have become increasingly popular in recent years.

People benefit from numerous products and services provided by ecosystems: clean water and air, food security, hydrological and climate regulation, and recreation to name just a few. PES aims to provide an incentive for private and communal landholders to shift to sustainable, environmentally friendly patterns of land use. Following an integrated land management approach, the intention is to promote sustainable use of natural resources not only on public land (usually protected areas), but also on private commercially used land. PES may become a competitive alternative to otherwise detrimental land use practices.

Ideally, a contract is made directly between the providers of ecosystem services (i.e. the landholder) and the beneficiary or beneficiaries of such services. This arrangement is, in essence, of a commercial nature; at the same time, it directly promotes the conservation of natural resources and ecosystems. PES can be either

temporary (in order to facilitate a transition to sustainable land use patterns) or permanent (as the major form of land use per se).

German development cooperation has been playing a significant role by supporting PES initiatives, mainly in Latin America. Support has been given in designing, implementing, monitoring, and financing initiatives, especially in the early stages. In particular, it involves creating suitable framework conditions, clarifying property rights, valuing ecosystem services and fostering new markets. Other important and meaningful contributions include developing fair contractual arrangements and suggesting appropriate economic alternatives. Furthermore, political and institutional frameworks for sustainable development have been enhanced by transferring and mobilising knowledge and skills at different levels. To date, about 15 different initiatives have been promoted in the following countries: Ecuador, Bolivia, Peru, Brazil, Costa Rica, Colombia, the Dominican Republic and Paraguay, while new initiatives are starting in Honduras, Nicaragua and Viet Nam.

The Ecuadorian PES initiative to conserve the Choco bioregion combines community needs and conservation interests by implementing 'conservation agreements.' These contracts foster the protection of the forests and biodiversity by providing economic and social compensation payments. The first agreement included a direct annual payment of US$5 per hectare, which takes into account the opportunity costs to the communities in terms of lost revenue from the timber trade. In this case, the agreement also included additional financial support to cover the salaries of community reserve rangers who maintain boundary trails, participate in biological monitoring, and protect the communal areas from illegal outside incursion and poaching. The payments support all local actors and are used for things such as alternative economic development, health, education, infrastructure and communal funds.

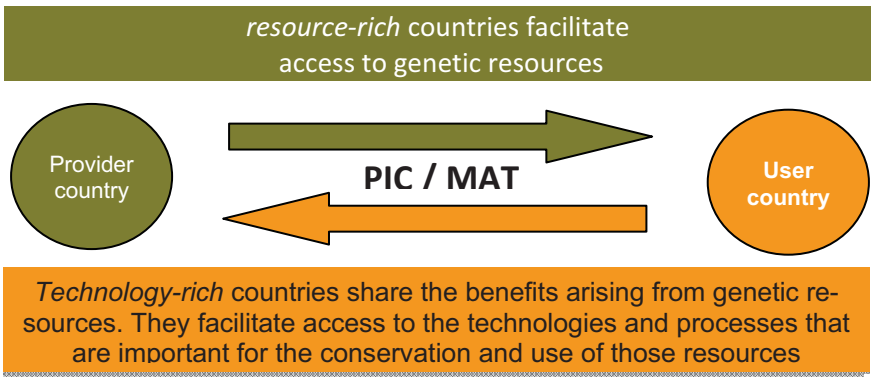
During the initial years, the project was supported and financed through the GTZ, the Chachis Centres and Conservation International, who facilitated donations from the band Coldplay, the Global Conservation Fund and others. The goal was to obtain sufficient capital for a trust fund that would ensure the payments in the long term. The communities are still strongly committed to the initiative. This has been achieved through transparency, participation and providing compensation payments to protect the forest and cover the cost of conservation. At the beginning of 2008, the successful experience of the Gran Reserva Chachi caught the attention of Ecuador's Ministry of the Environment (MAE). MAE decided to establish a system of conservation agreements at national level and created the Socio Bosque Programme. Through this initiative, the Ecuadorian Government provides a direct payment to landowners (individual or community) who agree to conserve native forest or other native ecosystems. These agreements have a term of 20 years, with the option of renewal. The Chachi communities have been among the first beneficiaries of the Socio Bosque programme. Over 27,000 hectares of Chachi territory have already been registered in the programme and the benefits for maintaining the forest have steadily increased. As a consequence, there are now more funds available for the Chachi Centres to invest in improving living conditions. Moreover, Socio Bosque ensures the sustainability of the conservation measures in the long term.

The Peruvian PES initiative aims to restore and conserve ecosystem services in the upper watersheds in the San Martin department. The Alto Mayo Valley, located in the transition area where the Andean foothills meet the Amazon, is home to rich biodiversity but has experienced significant growth in population and agricultural activity in recent years. Conversion of tropical rainforest into farmland is increasing the pressure on the ecosystems and on the goods and services they provide to the people. Convinced by the concerns of civil society and EPS, the water company of the small town of Moyobamba, the municipal authorities declared the upper watersheds a protected area in order to conserve biodiversity and ecosystem services. A steering committee made up of governmental institutions and representatives of civil society was founded and PES identified as a tool to finance the restoration and conservation activities in the area. In a public meeting, the inhabitants of Moyobamba agreed to add a fee for the PES to the water bill from August 2009 onwards, allowing the inclusion of water source conservation in the Moyobamba water company's master plan. The money collected goes to a separate account at EPS and is supervised by a steering committee; formal contracts between farmers, the municipality and the steering committee are still being negotiated. Local farmers have agreed to refrain from certain agricultural practices in parts of the upper watershed that negatively affect soil and water. They have also agreed to introduce agroforestry systems in the lower reaches and to reduce water contamination by livestock and wastewater from coffee processing. In turn, they receive compensation in the form of technical assistance in developing economic alternatives, and also materials needed, for example, to install agroforestry systems and barriers to stop soil erosion. The main challenges of implementing this kind of PES are related to public awareness building, environmental education, capacity development and governance structures, as well as fundraising and the political will needed to ensure the sustainability of the process. This initiative is promoted by the Ministry of Environment and the National Water Authority, and is supported by GTZ's Sustainable Rural Development Programme (PDRS).

Access to genetic resources and benefit-sharing (ABS)

Article 15 of the Convention on Biological Diversity (CBD) reaffirms the sovereignty of countries over their genetic resources. If these resources are utilised in other countries, then access rules need to be drawn up to ensure that the countries of origin have a fair and equitable share in the resulting benefits. This is known as access and benefit-sharing or ABS. The CBD further specifies that access shall be subject to prior informed consent (PIC) and be granted based on mutually agreed terms (MAT). PIC refers to consent obtained by the user from the government and relevant stakeholders before access takes place. The providers of genetic resources include indigenous peoples and local communities as owners, managers or custodians of genetic resources or associated traditional knowledge, which is often the basis for the development of modern pharmaceutical, cosmetic or functional food products. MAT describes the conditions and provisions for access and utilisation as well as provisions for benefit-sharing. MAT can be set out in a negotiated contract between the user and the provider involving other relevant stakeholders or in a standard material transfer agreement as has been established by the multilateral ABS system of FAO's International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA). The resulting challenge is to translate the lofty ABS vision into practicable mechanisms that will generate real benefits for countries and communities that provide genetic resources. Such benefits may include monetary or non-monetary compensation such as

Logic of the CBD as regards ABS



capacity building in biotechnology and participation in scientific research. Through its Implementing the Biodiversity Convention programme, Germany is participating actively in the debate on how to meet these requirements.

The Contracting Parties are called upon to create an appropriate regulatory framework by amending existing laws or adopting new legislation. A significant step was the adoption of the Bonn Guidelines on ABS at the Conference of the Parties held in The Hague in 2002 (COP 6). These guidelines are intended to support the Parties and other relevant actors in shaping national policy, legislative and administrative frameworks on ABS, and negotiating bioprospecting projects. At COP 6, the African Group called for a legally binding international ABS regime to ensure that the benefits from the utilisation of genetic resources are shared in a fair and equitable way between the countries of origin and the resource users. Despite an intense negotiation process, it took the ABS Working Group, which was established by the CBD to develop the regime, until its 8th meeting in Montreal, Canada (2009), to achieve consensus. The Protocol is scheduled to be adopted at COP 10 in October 2010 in Nagoya, Japan. Up to now, the most contentious issues within the negotiations included the following topics:

- Whether and how to include material accessed before entry into force of the CBD and the ABS Protocol. The African Group and other developing countries favour the utilisation approach, meaning that 'new' uses of genetic resources should fall under the scope of the ABS Protocol.
- To what extent are specific sectors, besides the material regulated under the ITPGRFA, excluded from the scope of the ABS Protocol. In the view of developing countries, a long list of exemptions implies a weak regime with little or even no relevance for creating an appropriate incentive for conservation, thus undermining the spirit of the CBD.
- Most developing countries perceived the mechanisms to ensure compliance with national ABS regulations and MAT proposed in the draft protocol at the 9th Session of the ABS Working Group in Cali, Colombia, as inadequate to prevent biopiracy. In the view of most developing countries, mandatory disclosure requirements in patent applications are among the key measures for monitoring and ensuring compliance, whereas the EU and other industrialised countries want to avoid any significant changes in the existing international patent system.

A further difficulty in the negotiation process has been the fact that other international forums deal with and regulate intellectual property issues. These include the World Trade Organisation (WTO) and the World Intellectual Property Organisation (WIPO).

Since 1998, the Implementing the Biodiversity Convention project has assisted government institutions and NGOs in Bolivia, the Philippines, South Africa and Viet Nam in building capacities for the development and implementation of national and regional ABS regulations and in achieving the meaningful participation of stakeholders. Experiences and lessons learnt from these pilot projects have helped to facilitate the integration of ABS into German development cooperation's bilateral and regional environmental programmes, e.g. in Madagascar, Namibia, the Central African Forest Commission (COMIFAC), the Himalaya-Hindukush (International Centre for Integrated Mountain

Development, ICIMOD) and the Amazon Basin (Amazon Treaty Cooperation Organisation). The process has also led to the launch of Germany's successful ABS Capacity Development Initiative for Africa.

Scaling-up to the regional level: the ABS Capacity Development Initiative for Africa

In 2005, the Directorate-General for International Cooperation (DGIS) of the Netherland's Ministry of Foreign Affairs and the Implementing the Biodiversity Convention project joined forces to build human and institutional capacity in developing countries to deal with complex ABS issues. The focus has been set on Africa – where the need for capacity development is high and specific requirements have been articulated by several countries: ranging from providing support for national and regional legislative processes to strengthening African positions on ABS at the relevant international negotiations under the CBD, WTO and WIPO. This ABS Capacity Development Initiative has, among other things, contributed to the increased preparedness of African delegates in the ongoing negotiation of an international regime on ABS. The initiative has received increased assistance from additional donors and partners. The Institut de l'énergie et de l'environnement de la Francophonie (IEPF), for example, joined the initiative to advance the integration of Francophone African countries and contributes to Pan-African meetings and workshops. This cooperation was a first step in developing the initial Dutch-German partnership into a multi-donor initiative for a concerted ABS capacity development for Africa. In 2009, the Norwegian Ministry of Foreign Affairs joined the initiative with the renowned Norwegian think tank, the Fridtjof Nansen Institute. Also in 2009, Denmark expressed interest to become a permanent member of the initiative with an initial contribution to the Initiative for organising a pan-African Minister Conference on ABS in 2010 in partnership with the Namibian Government. This initial contribution was significantly scaled up in mid 2010.

The initiative is linked to relevant global biodiversity related environmental processes through established cooperation with the Secretariat of the Convention on Biological Diversity in Montreal and the United Nations Environmental Programme in Nairobi. Besides its support to the African Group in the ongoing negotiation process, capacity development of relevant African stakeholders on ABS is the core activity of the initiative, with a view to implementing ABS as an instrument contributing to good governance, conservation and poverty alleviation. Major milestones so far are:

- Multi-stakeholder workshops are held at least annually at sub-regional level (West Africa and the Maghreb, Central Africa [COMIFAC], and East and Southern Africa). They are instrumental as a forum for the input and feedback of relevant stakeholder groups such as indigenous and local communities, the scientific community, business and civil society needed to formulate and harmonise the negotiation positions as developed by the African negotiators.

- An annual Pan-African workshop provides the opportunity for different stakeholders to take stock of ABS implementation in Africa and relevant international developments, and to provide guidance to the ABS Initiative.
- The first Pan-African Workshop on ABS and CEPA (Communication, Education & Public Awareness) held in Nairobi in 2009 identified communication approaches and messages to and from different stakeholder groups. A follow-up Task Force Meeting in 2010 in Bonn developed tools and instruments for formally and informally getting messages across to the diverse stakeholders.
- At the first Pan-African Workshop on ABS and Forests in June 2009 in Nairobi, over 20 countries representing ABS/CBD and UNFF focal points drafted recommendations for a way forward to a more coherent and sustainable use of forests including non-timber forest products (NTFPs).
- The Business Dialogue Forum on ABS, held in October 2009 outside Pretoria in

Hammanskraal, along with the Union of Ethical BioTrade (UEBT), Phytotrade SA and the International Chamber of Commerce (ICC), provided an opportunity for a number of African negotiators and business and commercial research representatives to enter into a moderated dialogue.

- A legal and technical skills training course was developed in 2009 by the Environmental Evaluation Unit of the University of Cape Town, South Africa, with the support of and in close cooperation with the Initiative. The course serves as a blueprint for further courses to be held at other universities and research centres throughout Africa.
- So far, direct support for development and implementation of national ABS policies and regulations has been given to relevant government authorities and other stakeholders in Benin, Côte d'Ivoire, Kenya, and Liberia. In the long run, the initiative can be considered as an iterative process that supports the vision of ABS as a powerful instrument for reducing poverty in Africa, and positively impacting on.

- Increased awareness of African policy-makers and legislators on ABS matters, especially their cross-sectoral remit and their potential for poverty alleviation.
- The meaningful participation of all relevant stakeholders at all stages of the negotiation, development and implementation of ABS regulations – at the international, national and local level.
- Improved regional cooperation on ABS issues among African countries.
- Development of partnerships for business opportunities.

The next step: implementing ABS at the national level post-Nagoya

ABS' ultimate goal is the fair public and private valorisation of genetic resources based on a mutual understanding of interests between 'providers' and 'users.' So far, the potential for ABS mechanisms to contribute to poverty alleviation and economic development has rarely been exploited, since there is still no operational framework for implementing the CBD principles on ABS. The international ABS regime, which will be concluded in October 2010, aims to establish such an operational framework at global level. However, the full potential of ABS mechanisms to contribute to national and local economic development and poverty alleviation cannot yet be fully realized by most developing countries because of: (1) The absence of effective ABS policies and legislative frameworks at national level; (2) Limited research and development capacities; and (3) Insufficient public investment in sustainable commercialisation processes.

The UNEP/GEF (United Nations Environment Programme/Global Environment Facility) project entitled Supporting the Development and Implementation of Access and Benefit Sharing Policies in Africa, which is currently in preparation, is an important step that is intended to overcome these bottlenecks. The regional project covers Cameroon, Kenya, Madagascar, Mozambique, Senegal and South Africa, and GTZ has been appointed to act as lead executing agency.

Legal certainty and basic infrastructure are both requirements for investment in and valorisation of genetic resources. Examples from Asia highlight the fact that the research and development capacities of partners such as universities and private and public research institutions in provider countries are key for the successful valorisation of genetic and biological resources. Functioning R&D facilities are largely non-existent in many developing countries, especially in Africa. Against this background, the ABS Capacity Development Initiative is discussing possibilities with private sector partners for establishing and promoting comprehensive R&D platforms at the regional level, with a view to fostering regional cooperation on biotrade and ABS. An early focus on improvements of readily marketable products will help to generate income and profit, often as early as the second or third year, which can be shared with the producers and used to further improve R&D capacitie

The traditional knowledge of indigenous and local communities

In recent decades, the disadvantages suffered by indigenous peoples have attracted growing political attention worldwide. This was achieved mainly through the notably improved ability of indigenous people to communicate their interests on the world political stage and through the resulting process of recognition of indigenous rights at the United Nations (UN Declaration on the Rights of Indigenous Peoples) and other international organisations, such as the Organization of American States. Indigenous peoples and local communities often have a deep understanding of their environment and its ecology. They know numerous ways of using wild plants and animals – for example as food or medicines. They have also developed a variety of cultivation techniques for large numbers of plants. This knowledge forms an important basis for conserving and sustainably using global biodiversity. In this way, cultural and biological diversity are closely interlinked.

Under Article 8 (j) of the Convention on Biological Diversity (CBD), the Contracting States have made a commitment to respect and promote the use of traditional knowledge. This is closely related to access and benefit-sharing (ABS) and prior informed consent (PIC), which are other key principles in the implementation of the CBD. One of the major outcomes of the Ad-Hoc Working Group on Article 8 (j) and Related Provisions of the CBD (WG8j) is the Akwé: Kon Guidelines, which were adopted at the Conference of the Parties in 2003 (COP 7). These voluntary guidelines are often used for reference and provide a collaborative framework that ensures the active involvement of indigenous and local communities in assessments of the cultural, environmental and social impact of proposed developments on sacred sites and on lands and waters these communities have traditionally occupied. In the sixth meeting of the WG8j in 2009, the discussions focused mainly on mechanisms for participation, *sui generis* systems for the protection of traditional knowledge and an ethical code of conduct. The working group is requested to present proposals on these issues to the next COP. The plenary also adopted views on the international ABS regime. Work on these themes, the formulation of positions and the search for best practices and how to implement them have dominated the discussions in recent years.

The implementation of Article 8 (j) still faces the challenge that indigenous and local communities generally regard biological resources and traditional knowledge as common goods that cannot be privately owned. This is, however, at odds with the practice of the World Trade Organization (WTO), which, through the TRIPS Agreement (Trade-related Aspects of Intellectual Property Rights), is seeking to institute private and individual rights to knowledge and intellectual property. In many cases, traditional knowledge is multi-ethnic and transboundary by nature, which is particularly important with regard to ABS and PIC. A number of issues still need clarification, including the general question of the judicial legitimation and the degree of representation within customary governance structures in indigenous communities. The ongoing negotiations on an international ABS regime are expected to provide more clarity on these issues.

German development cooperation has been working with indigenous peoples for a long time, with an emphasis on direct cooperation with indigenous organisations. Indigenous organisations are strengthened conceptually in thematic, transnational networks, in which experience and expertise can be exchanged through the Implementing the Biodiversity Convention programme. Germany takes an active part in the international negotiation process on the further development of Article 8 (j) of the Convention and supports pilot measures at national level. This is the case, for instance, in Honduras, where the GTZ collaborates with

the national CBD focal point at the Dirección General de Biodiversidad (DIBIO). Started in 2008, the project helped establish an intersectoral working group on Article 8 (j), for example. With the support of GTZ, the indigenous intercultural university in Nicaragua, the Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense, has developed training programmes dealing with the CBD and specifically with issues related to Article 8 (j). A total of 54 indigenous leaders from the entire Central American region have now been trained in over 250 courses. Many of them are decision-makers and promote the implementation of the CBD in their home countries.

In the Philippines, GTZ has supported the government in refining and implementing national regulations on access to genetic resources. The overall aim of this legal framework is to regulate bioprospecting to ensure that the resulting benefits are shared with local communities and used both for the development of indigenous communities and the conservation of nature. In Ecuador, the private public partnership project ProBenefit, supported by the German Federal Ministry of Education and Research (BMBF), has clearly demonstrated the difficulty of defining who is the real owner of traditional knowledge, who should be seen as the negotiating partner and how a consultation process must be designed in order to guarantee that all the indigenous and local communities involved receive a fair share of the benefits. After four years of discussion, these crucial questions remained unresolved. Even if an agreement on benefit sharing is reached, the management of funds will remain a major challenge for indigenous and local communities. In the case of the San in South Africa, who negotiated a licensing agreement on the use of the Hoodia plant, the GTZ is supporting them in building up a structure for transparent internal management of the expected revenue.

Hand in hand with the Centre pour l'Environnement et le Développement (CED), a project supported by GTZ in Cameroon focuses on safeguarding the rights of local communities in protected areas, developing management plans and documenting traditional knowledge. In the South-East Asian region, a GTZ programme works with the Alianza Masyarakat Adat Nusantara (AMAN), the Indigenous Peoples Alliance of the Archipelago and the Forest Peoples Programme (FPP), to support the government in implementing free prior informed consent (PIC) procedures, which will be integrated into Indonesian forestry sector policy. Further measures have been supported in China, Ecuador and Peru.

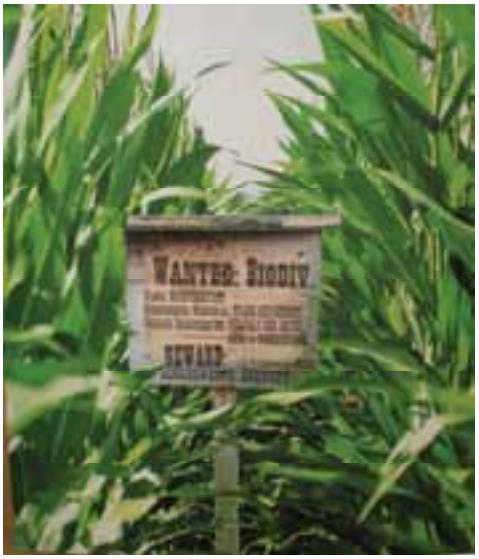
For the Amazon region, the Coordination of Indigenous Organizations of the Amazon Basin (Coordinadora de las Organizaciones Indígenas de la Cuenca Amazonica, COICA) is the main partner for GTZ as the umbrella organization that integrates nine organisations from the nine countries that share the Amazon Basin. An important collaborative project for GTZ was its support for the development of COICA's Amazon Indigenous Agenda, which was renewed in November 2009. The paper is a strategic mission statement and provides a basis for the struggle for indigenous rights. Important activities and steps are planned within the framework of this agenda, which also serves as a foundation for international cooperation. One of the key aspects is that the indigenous organisations intend to take stock of their collective traditional knowledge and the ancestral wisdom of all different peoples so as to preserve the complex structures of society they have developed over the centuries. The concrete development of a bio-cultural protocol is scheduled to start in mid-2010. This protocol aims to conserve, restore, use and protect the traditional knowledge of the indigenous peoples of the Amazon Basin.

GTZ is also supporting a Latin American university network that aims to recognize, preserve and pass on indigenous traditions and indigenous knowledge. The core element is a group of indigenous leaders and experts from Latin America who are recognized by universities as lecturers and transmit specific indigenous knowledge, e.g. on history and philosophy.

Western academics work with indigenous lecturers and promote an intercultural learning process. Since 2007, 292 men and women have been trained, of whom over 90 percent work in indigenous organisations, government institutions, academic institutions and international organisations.

Biosafety

Expectations about the impacts of genetic engineering on biodiversity diverge. On the one hand, genetic engineering is expected to help breed plants that are pest resistant and less dependent on specific soil properties or climatic conditions, therefore making a significant contribution to solving world hunger. After 25 years of research and development, and 14 years of commercialisation of genetically modified organisms (GMOs), herbicide resistance is still the dominant trait of all GM crops in the field. Efforts to create pest-resistant plants have been successful in only a few cases where the pests are insects that are susceptible to the Bt-toxin. No significant progress has yet been made on tailoring them to specific soil and climatic factors. On the other hand, it is feared that GMOs may have adverse effects on the environment and society, as well as on human and animal health. The controversy over which scientific approaches and methods are appropriate for assessing such risks and monitor the effects of GMOs is ongoing.



To minimise or prevent negative impacts on biodiversity and human health, different assessment and management instruments are needed during the GMO development, testing and utilisation stages. GMOs are used in what are known as biosafety frameworks, the most universal of which is provided by the Cartagena Protocol on Biosafety to the Convention on Biological Diversity. The Cartagena Protocol contains provisions for the safe transport and handling of GMOs designed to ensure the protection of biodiversity. Having come into force in 2003, the Cartagena Protocol is the first legally binding international treaty to operationalise the precautionary principle. On the basis of prior informed consent and publication through the internet-based Biosafety Clearing House, Parties to the Protocol can regulate and place conditions on the import and use of GMOs. Parties are also allowed to impose import restrictions or a ban on GMOs, including in situations where conclusive evidence concerning possible risks is not yet available.

The German Government took an active role in the Cartagena Protocol negotiations. As early as 2000, it set up an initiative entitled Capacity-Building for the Implementation of the Cartagena Protocol. It comprises six elements: policy advice, institution building, basic and advanced training for decision-makers, experts and multipliers, public awareness raising, education, and promotion of public participation. GTZ began implementation of bilateral measures related to biosafety in 2003, mostly as pilot projects under its Implementing the Biodiversity Convention project. The partner organisations predominantly requested support in the areas of awareness raising, education and public participation. The pilot projects achieved substantial results and supported the promotion and implementation of the Cartagena Protocol at national level.

Support is, for example, being given to the Chinese Nanjing Institute of Environmental Science and the Chinese Ministry of the Environment. In the first phase up to 2008, activities focused on enhancing data management relevant to biosafety, fostering access to biosafety-relevant information for decision-makers and promoting public participation in biosafety decision-making. In the current project phase, the focus lies on implementing the public participation mechanism developed in

the first phase and setting up a biosafety training course. Another priority is consolidation of the impacts achieved in the first phase. This is being achieved through additional international workshops and by establishing a permanent international biosafety forum.

Germany also supports African countries in handling GMO issues. The African states played a leading role in negotiating the Cartagena Protocol (1996–2000) and at the same time the Organisation of African Unity (OAU), as the predecessor organisation to the African Union (AU), drafted an African model law for safety in biotechnology. This model law is meant to serve the Member States as a guiding framework and help them develop their own national legislation. Since 2005, Germany has been supporting the African Union Commission (AUC) in building the capacities needed to competently advise its Member States on biosafety issues, such as organising national biosafety control systems. As part of this cooperation, a biosafety office has been set up at the AUC headquarters in Addis Ababa. One of the achievements of the project is the development of an African strategy for long-term biosafety capacity building in cooperation with Member States. In 2006, this strategy was endorsed by the African Ministerial Conference on Science and Technology.

The project also initiated the revision and updating of the African model law. Regional workshops were held in 2008 and 2009 to integrate the input of Member States and various stakeholders. This process has been supported by the African Ministerial Conferences on Science and Technology and on Environment and by the AU's Executive Council. The revision is scheduled to be finalised in 2011, after the additional presentation of the revised model law to other ministerial conferences - on trade and agriculture, for example. This broad consultation process is crucial to achieving a model law that is supported by the different sectors of the governments and by the various stakeholders. In addition, financial contributions by GTZ allow the AU Commission to support the African delegates to the Cartagena Protocol negotiations in attending two-day preparatory workshops. Delegates then have the opportunity to develop and shape a joint African position. Another component of the work of the AU Commission is the provision of information material on different aspects of biosafety.

Germany supported the AU Commission in making its publications available in the four official AU languages English, French, Arabic and Portuguese. GTZ also facilitated the establishment of a website for the project that allows easy access to information. The biosafety office is currently being institutionalised and consolidated so as to fully incorporate it into the AU on a long-term basis and make it independent of German support.

In addition to bilateral activities, Germany, as the third largest donor to the Global Environment Facility (GEF), has taken an active part in the development of the GEF Biosafety Strategy, the National Biosafety Framework and Biosafety Clearing House projects. It also supports activities in the international coordination of biosafety capacity building.

Intellectual property rights and biotrade

The use of biological and genetic resources is becoming more important by the day – for developments in biotechnology and for new processes and products, especially in the fields of environmental protection, medicine and food. Most of these resources originate in developing countries, whereas most of the value creation – which often draws upon local traditional knowledge – and marketing, including patenting, takes place in the industrialised countries. Thus, in most cases the commercial use of biodiversity does not achieve its full potential for promoting development. There is tension between the aims of the Convention on Biological Diversity (CBD) and other international agreements that regulate intellectual property and trade, for example the Food and Agriculture Organization of the United Nations' (FAO) International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), on the one hand, and the system of incentives to protect intellectual property rights under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), on the other.

Under the CBD, access to genetic resources requires the prior informed consent (PIC) of the country providing the resources and, assuming it is given, stipulates that it must take place on mutually agreed terms (MAT). The objective of this is to achieve a fair and equitable sharing of the benefits derived from the use of genetic resources (ABS). The CBD also requires the Parties to involve indigenous and local groups in ABS systems. As the holders of traditional knowledge, they often have an important role to play in the use and conservation of biological resources. The patent protection for microorganisms, non-biological and microbiological processes stipulated under TRIPS has created an incentive for research institutes and producers in the biotechnology, agriculture and pharmaceuticals industry, for example, to engage in what is known as bioprospecting as part of its product development process. TRIPS does not, however, stipulate that patents can only be applied for with the agreement of the original owner of the resource nor that the benefits must be shared fairly and equitably. As a result, patents that are not CBD compliant are often granted. Inadequate scrutiny means that patents on inventions based on genetic resources or traditional knowledge are often granted in error since the criteria of novelty and inventive step are not met. Both cases are often classed as biopiracy.

Classical intellectual property rights can also have a significant influence on Farmers' Rights, in that they may restrict their access to genetic resources, for example, or reduce the

opportunity for benefit sharing. The term refers to the traditional rights of farmers as stewards and custodians of agrobiodiversity. They include their right to save, use, sell, exchange and breed seeds and propagating material, thus preserving varieties. They also have a right to receive financial remuneration from the seed industry that uses their services and from the state or the international community for the contributions they make to the global pool of plant genetic resources and to the development of commercial plant varieties. In other words, they have a right to benefit sharing. Systems that provide strong protection for seeds are conducive to establishing the formal seed system. In farmers' seed systems, which in India, for example, supply up to 80 % of all seeds, there are no exclusive property rights to varieties. Farmers' Rights have been recognised in international law under FAO's International Treaty on Plant Genetic Resources for Food and Agriculture.

What do the regions need? The example of SIECA

As part of a global series of dialogues, the BMZ and GTZ organised two regional dialogues in Latin America on biodiversity and intellectual property rights in 2009 and 2010. The two multi-stakeholder workshops in Costa Rica and Peru brought together leading decision-makers and actors from business, research, civil society and indigenous communities to develop strategies and common approaches that aim to create greater coherence between policies and more appropriate rules for patent applications, protect traditional knowledge and establish an effective ABS system. Discussions among participants stressed that advisory services would be needed to implement coherent approaches of that kind to better reconcile environmental and trade aspects in development cooperation. The regional dialogue in Costa Rica was co-hosted by SIECA (Central American Secretariat for Economic Integration), which was named by the participants as an important lever for implementing a regionally coordinated strategy on biodiversity and intellectual property rights. GTZ is supporting SIECA in strengthening and better harmonising patent regulations in the region. Advice on biodiversity aspects will be a priority and this is particularly relevant for dealing with intellectual property rights.

Biotrade as an opportunity for sustainable use of biodiversity

Biodiversity is the source of many products and services used directly by society. Millions of rural people depend on biodiversity for food, medicine, income, ecosystem services and cultural and spiritual needs. Currently, biodiversity provides essential inputs for diverse industries such as agriculture, cosmetics, pharmaceuticals, pulp and paper, and waste treatment. Research shows that market interest and demand for biodiversity products and services is growing, giving a comparative advantage to biodiversity-rich countries. The estimated value of the global market for products based on biological and genetic resources is between US$500 and 800 billion.

Biotrade is a relatively new concept and offers an opportunity to finance the sustainable use of biodiversity by valorising products and services derived from the utilization of biodiversity. The term biotrade refers to those activities of collection or production, transformation, and commercialization of goods and services derived from native biodiversity (genetic resources, species and ecosystems), under criteria of environmental, social and economic sustainability. Nowadays, trade is mostly based on voluntary trade measures developed by the private sector, such as codes of conduct, certification and other social and ecological labelling schemes, which generally aim to achieve the dual aim of conserving biodiversity and equitably distributing benefits to communities to enhance their livelihoods. At the same time, certain framework conditions such as non-tariff trade barriers play an important role. They include, for example, import requirements imposed by legislation and standards (the Novel Food Regulation, rules of origin, good manufacturing prac-

tices, etc.) or product differentiation standards. To confront this challenge, German development cooperation supports measures to create an enabling environment for the sustainable use of biodiversity and to promote value chains.

Capacity building for biotrade in Namibia, Nepal and Peru

GTZ's Capacity Building for Biotrade project is implemented using a two-way approach to address national and international challenges in promoting biotrade. The measures undertaken in three selected countries – Namibia, Peru and Nepal – serve to raise awareness of biotrade opportunities and reflect them in national trade policies and strategies with a view to attracting investors and establishing sustainable value chains. The project helps build the institutional and technical capacity needed to meet complex technical requirements and effectively use voluntary sustainability standards as a marketing tool. At the international level, the project provides support for more effective participation in the international trade negotiations that affect biotrade, such as on Sanitary and Phytosanitary Measures (SPS), Technical Barriers to Trade (TBT), Intellectual Property Rights (IPRs) and Access and Benefit Sharing (ABS). Project executing agency is the UNEP-UNCTAD Capacity Building Task Force for Trade, Environment and Development (CBTF), based in Geneva. CBTF cooperates closely with GTZ programmes and their partners in the three pilot countries. While the main idea is that stakeholders in the pilot countries should be enabled to exploit the potential inherent in biotrade, the practical and realistic examples from the three countries are also expected to contribute to increased understanding of the often very technical discussions that take place among multilateral organisations and within negotiations.

Sweet chocolate from Ecuador

Fino de aroma cocoa has been known since ancient times for its energy-boosting effects. Today it is considered the best cocoa in the world and is in great demand from large chocolate manufacturers. In the Ecuadorian Amazon, the Chankuap Foundation, supported by German development cooperation, works with 970 families from indigenous communities, supporting them in their use of local plant species to increase production, in traditional practices to improve land use, in species diversification, in the renewal process for organic product certification and the fair distribution of revenue. Enhancing productivity within the indigenous communities aims both to increase the volume of produce available for use by the communities themselves and the volume available for sale. The work focuses on cocoa, Amazonian peanuts and achiote, and on re-establishing varieties traditionally cultivated by families in their own gardens – known as *chacras* – in order to secure their own food supply. All production is organic, which helps to conserve the land and the fragile ecosystem of the Amazon.

Business and public private partnerships

Biodiversity in Good Company – a business and biodiversity initiative

When Germany took over the presidency of the Conference of the Parties to the Convention on Biological Diversity (CBD) in 2008 (COP 9) in Bonn, it launched an initiative called Biodiversity in Good Company with the aim of getting business involved in protecting biodiversity. This is the first example of an international initiative for the private sector that is dedicated exclusively to biodiversity. The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) commissioned GTZ to implement this initiative to involve the private sector in the implementation of the CBD in an innovative way. To date, 42 companies from five countries (including Brazil, Germany and Japan) have joined. The companies, which mostly have global operations, implement their measures in the field of environmental protection and nature conservation not only in Europe but also in developing and emerging countries.

One of the members is Centroflora, a Brazilian company that manufactures plant extracts for the pharmaceuticals, cosmetics, health and food industries. Centroflora takes particular care to ensure that the raw materials it uses are predominantly organically grown and sustainably harvested. It is also careful to respect local communities and their way of life and to ensure access and benefit sharing (ABS), for example through profit sharing.

HeidelbergCement is a manufacturer of cement, concrete and aggregates such as sand,

gravel and crushed stone and has operations all over the world. In the field of environmental protection, HeidelbergCement has developed a species protection programme for sand martins in Germany, Poland, the Czech Republic, Hungary, Belgium, Norway and Latvia. At the beginning of 2009, the company began to implement its guideline on promoting biodiversity in mineral extraction sites. The aim is to promote dialogue with stakeholders, to increase biodiversity before, during and after extraction, and to protect local nature. The guideline is already being applied at all the company's European locations and will in future be extended to its international locations.

Saraya, a Japanese company making hygiene, sanitation and health products, operates sustainable palm oil plantations in Borneo, where it also establishes green corridors and sponsors elephant and orangutan reserves. The company is also working to achieve respect for biodiversity throughout the entire production process in Borneo and Japan.

Integrating the private sector into the implementation of regional environmental strategies in Central America

The Mesoamerican Biological Corridor (MBC) was created in the 1980s as a transfrontier project involving the countries of Central America. One of the factors underlying its creation was the awareness of the special position Central America occupies in terms of global biodiversity: an area covering only 0.5 % of the Earth's surface is home to 7 % of the world's biodiversity. Preserving and enhancing this calls for a strategic, integrating concept that encompasses all the countries of Mesoamerica (Mexico, Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama). On an operational level, not only the structures of the public sector, but also the private sector, are of decisive importance (producers, small-scale farmers, agribusiness, exporters etc.). Currently, this importance is often inadequately incorporated into the development and implementation of regional political strategies.

From the outset, German development cooperation has been involved in implementing the vision underlying the MBC project as a transboundary system of protected areas and in recent years has increasingly concentrated on recruiting the support of the private sector. For example, in the last ten years, several public private partnership (PPP) projects have been implemented, such as promoting sustainable production methods in international value chains and afforestation measures. To harmonise the many diverse measures and make more strategic use of the contributions of the private sector (both of producers and international trading companies), a platform entitled Biodiversity Partnership Mesoamerica is being set up. It focuses particularly on partnerships between economic actors but also on close cooperation with public sector institutions at regional, national and local level.

The platform is currently being set up as part of a PPP project involving, as private sector partners, the German supermarket chain REWE, the multinational fruit company Chiquita and the National Banana Corporation of Costa Rica (CORBANA), with GTZ as the public sector partner. This development partnership on the Atlantic coast in the border region between Costa Rica and Panama was formally agreed and contracts were signed in December 2009. The partners are funding networks of private and public actors with a total of €1.2 million with the aim of improving cross-national cooperation to preserve biodiversity in the region. The joint project is also supporting measures to protect the ecosystems and nature reserves of Bosque Sixaola in Costa Rica and San San Pond Sak in Panama. Another aim is to help local people – particularly indigenous groups – to develop new economic opportunities and sources of income and improve their self-governance. To gain the skills they need to develop new marketable services, people take part in training schemes in environmental sensitisation, nature protection and sustainable production methods. Guided tours of the banana

plantations, excursions to see the manatees that live there and symbolise the biodiversity of this tropical region, extensive information services in visitor centres, and courses to raise environmental awareness are now available for both local people and visitors to the protected areas.

To ensure sustainability, alliances with local, regional and intergovernmental organisations are being systematically expanded. The expansion of this network and the creation of the Biodiversity Partnership Mesoamerica is part of the remit of the Regional Unit for Technical Assistance (RUTA), which is based in San José. RUTA has over 25 years of experience in advising and implementing projects to promote integrated approaches in the field of sustainable production methods, in particular in agriculture. Here RUTA, originally a programme initiated by the World Bank, is also supporting the development of regional strategies at government level. As part of this work, RUTA is also encouraging the political mainstreaming of the Biodiversity Partnership Mesoamerica.

As a regional strategy for protected areas and sustainable development, the MBC is unparalleled in the world in its particular configuration and significance. The platform will now enable it to expand in two key aspects: through practical projects on the ground and through the systematic involvement of the private sector. German development cooperation is making a significant contribution to this by supporting the platform as part of the broad range of PPP measures.

Sustainable tourism development

Tourism is not mentioned as such in the CBD, but in 2004 the Conference of the Parties to the Convention (COP 7) adopted the Guidelines for Biodiversity and Tourism, which constitute a framework of standards for ecologically sustainable tourism development. The issue of tourism has now become an integral part of the debate on sustainable use of biodiversity within the Convention.

The GTZ supports the development of tourism destinations that harness the value of ecosystems efficiently in terms of the natural capital resources they use and the sustainable incomes they create for local communities. The consistently rising demand for nature-based tourist destinations over the past decades has in turn provided the tourism industry with a powerful monetary incentive to safeguard ecosystems. Some tropical forests, for instance, generate up to US$400 per hectare in tourism revenue annually. Coral reefs of a similar size in tourism hotspots like the Maldives may even achieve US$1 million.

Apart from tourism, most ecosystems also support livelihoods in a number of other ways, through activities such as agriculture, forestry, fishery or hunting. It is therefore important to identify ways to internalizes the external costs of tourism activities.

Tourism businesses are becoming increasingly willing to pool their efforts. In recent years,

GTZ alone has implemented over 50 projects with a tourism component. In addition to that, DED supports and advises on sustainable tourism practices in over 30 projects, while KfW invests in the infrastructure of over a dozen large-scale protected areas worldwide.

In Morocco, the GTZ programme on nature conservation and desertification control promotes responsible tourism development in protected areas, mainly in the south of the country. Over the past few years, guidelines for a sustainable tourism strategy in Morocco's protected areas have been developed and have now been integrated into the national nature conservation strategy. Communities living around the national parks receive assistance in setting up essential infrastructure and in establishing marketing cooperation with international tourism agencies. A case study has shown that the Souss-Massa National Park protects critically endangered species like the Addax antelope or the bald ibis, while at the same time generating a total of €1.2 million in visitor revenue and providing direct income to 400 families living near the park.

In Albania, GTZ has supported destination development in a network of tourism trails and accommodation facilities in the Thethi Valley in the Northern Albanian mountains. Thethi National Park ranks among Albania's largest forest areas and provides a habitat for several endangered species, such as the European lynx. Surrounded by the 2700-m summits of the Albanian Alps, Thethi's pure air, crystal clear rivers and lush vegetation, including medicinal herbs, offer an important home to extensive biodiversity and valuable ecosystem services. Local communities in the Thethi hinterland have been among the poorest in the country. A combined effort by GTZ and the Global Environment Facility (GEF) since 2006 has helped to create a modern accommodation infrastructure that has the least possible impact on ecosystems. Since 2008, tourism has provided Thethi with an estimated income of up to €150,000 annually. Income generated by tourism today is seven to eight times higher than the social welfare benefits allocated to the same region by the Albanian Government.

GTZ also supports many countries in participating in international tourism fairs, mainly the International Tourism Trade Show (ITB), which takes place annually in Berlin, and organises the Tourism Forum International at Reisepavillon, a smaller annual convention that focuses exclusively on sustainable tourism products, initiatives and policies. Local tour operators, projects and other stakeholders in the tourism industry use these opportunities to establish new business relationships. Furthermore, GTZ is involved in several international

sustainable tourism networks such as the Sustainable Tourism Development Task Force of the Marrakech Process on Sustainable Production and Consumption. GTZ also participates in the Global Sustainable Tourism Criteria (GSTC) certification network, initiated by the Rainforest Alliance, UNEP, the World Tourism Organization (UNWTO) and the UN Foundation. All these activities are promoted by GTZ in order to exchange information and experiences with worldwide initiatives and to increase capacity in developing countries to further their own performance in sustainable tourism development.

Renewable resources for bioenergy production

Given the projected growth in global population to up to nine billion people by 2050 and the change in consumption patterns, new strategies to satisfy our worldwide energy demand are needed. Sustainable and renewable sources of energy play a key role in meeting the demand in an ecologically sound way over the long-term. A mix of wind, water, solar, geothermal and bioenergy would seem to be a practical solution. Bioenergy thus plays an important role. Its economic, social and environmental impacts, however, vary significantly, depending on changes in land use, type of technology, location and farming practices. Bioenergy's bad reputation mainly results from large-scale production systems such as plantations, which can pose a threat to biodiversity.

The other side of the coin is that bioenergy can also have positive side-effects, contributing to climate protection, for example, and holding great potential for the agricultural sector and in particular for small-scale farmers in developing countries. New sales opportunities can emerge, combined with an opportunity for reducing poverty in developing countries. A decentralised bioenergy supply in rural areas can support the creation of value chains in the processing industries and generate employment and additional income. Rising production levels and diversified energy sources could secure the required supply and at the same time help to reduce energy imports. Following these principles, the EU, along with several other countries such as China, decided to use bioenergy to meet part of their demand. In order to soften the potential environmental and social impacts, the countries are also putting in place a biomass sustainability certification scheme.

The impacts on biodiversity expected from the industrial production of renewable raw materials for bioenergy are similar to those associated with mass food production. Rising worldwide demand leads to an intensification of production, which can be achieved either by extending cultivated areas or by increasing the yield per hectare. This intensification holds significant environmental risks, such as land-use changes, competition for and conflict over resources and eventually contamination and degradation of natural resources such as water or land. There is also a considerable risk of large-scale conversion of natural areas into monocultures with the subsequent serious loss of biodiversity. Consequently, there is a trade-off between maintaining biodiversity and ecosystem services and intensification of agriculture.

In this context, the particular form of cultivation needs to be taken into account. Large-scale production systems such as plantations pose a threat to biodiversity. By contrast, areas that are cultivated by smallholders usually have a much higher diversity of species. This is mainly due to structural differences between small and large-scale rural production systems. Differences in land tenure systems often mean a higher crop variety and consequently a large number of transitional spaces between the different cultivation areas. A dramatic change in cultivation methods, combined with the introduction of new crops or invasive species, could reduce this natural variety and threaten biodiversity. Con-

sequently, land and production systems must be organised in a way that protects natural habitats, animal and plant species and the scenic characteristics of cultural landscapes. For that reason, converting natural habitats of high ecological value into new areas of intensive cultivation should be avoided at all costs.

To prevent such losses of biodiversity, more sustainable and adapted forms of cultivation should be considered, such as conservation agriculture, intercropping or crop rotation. These semi-natural systems have positive side effects in terms of diversification and risk management. However, they may be less able to meet increased production needs and less effective in securing the required energy supply and reducing poverty. New forms of outgrower schemes (contract farming) combine the advantages of smallholder production systems in terms of sustainability and conservation of biodiversity with the benefits of industrial processing structures, such as reducing per-unit costs and providing financial and technical assistance. These schemes also include training to help farmers enhance their skills in sustainable and ecological production methods. A tool used to ensure the application of these new production systems is the implementation of sustainability standards. They cover the entire production process ranging from pre-use of the cultivated area to the energy recovery phase, incorporating sustainable cultivation methods, the protection of natural habitats and the reduction of greenhouse gas emissions. This helps to soften the environmental impacts, especially on biodiversity, and at the same time creates benefits, such as income generation, for smallholders.

Another possibility for biodiversity-friendly bioenergy production is the use of agricultural waste and residue material. Existing technologies include the use of biogas, biomass gasification and second-generation biofuels that have less environmental impact. Using waste and residue material for energy does not necessarily need intensification of agriculture, and it might be possible to avoid negative environmental impacts and conserve biodiversity in the long-term. However, the efficiency of several of these technologies is not yet fully developed and production costs are quite high. For example, second generation biofuels are not yet a marketable alternative to traditional energy production. More research is needed to further develop these methods into practical energy solutions.

Sustainable palm oil production in Thailand

Palm oil production has always been a contentious issue. It is argued that rapid expansion and large-scale production systems, like the ones found in Indonesia and Malaysia, have detrimental effects, such as the destruction of rainforest and loss of biodiversity. By contrast, palm oil production in Thailand is linked to smallholder production systems and has advantages for biodiversity. Since large plantation systems are rare, the cultivated landscape is a diverse mosaic structure of different crop types, including rubber and rice production.

A sustainable palm oil production project in Thailand, commissioned by the German Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) and implemented by GTZ, demonstrates how palm oil can be produced in a sustainable manner, thereby safeguarding natural diversity. Farmers practice sustainable crop management, training is provided and sustainability standards are applied. Sustainable resource management and increased yields help to prevent expansion of farming land and conserve natural diversity. Since the project only recently started in 2009, no long term results are visible yet. But it has become clear that the sustainable agriculture approach is an important step towards conserving biodiversity, reducing poverty and increasing the income of the rural population.

Public awareness building

Biodiversity is often difficult to communicate. The reasons for that lie more often than not with the 'sender' rather than the 'recipient' of information. Emotions are often more important than knowledge in triggering sustainable change. With this in mind, German development cooperation is attempting to shift from impressive short-term on-the-spot activities to a more solid and structured communication strategy.

COP 6, the 6th Conference of the Parties to the CBD, held in The Hague in 2002, launched a global initiative for Communication, Education and Public Awareness (CEPA). In 2007, a toolkit was published that provides a link between science and ecology on the one hand and people's social and economic realities on the other. GTZ has been a member of CEPA's informal advisory committee since 2006 and has made various contributions to the CEPA collection of innovative examples and ideas.

GTZ is developing a broad range of activities involving different target groups and diverse media and information channels. In its educational and communication activities, GTZ utilises several key messages consistently over a longer period. Key messages are by their very nature limited in scope and depth, but they do stay in the hearts and minds of people. Examples of key messages are:

- Sustainability needs diversity;
- Conservation of diversity is much more than the protection of species or nature conservation – it is about maintaining humankind's natural life-support systems;
- Conservation and development are two key elements of sustainability. Limiting resource consumption, however, does not mean going back to the Stone Age, but it does involve combining sensible behaviour with advanced technology;
- Conservation of diversity concerns us all. That includes companies and enterprises as key stakeholders (Germany's Biodiversity in Good Company initiative).

Thus, conservation and sustainable use of biological diversity does not stand in isolation in these messages; it is linked with other social and economic issues. Biodiversity is therefore extended to a level on which everyone feels personally addressed and affected.

Several initiatives have contributed to the ongoing UN Decade of Education for Sustainable Development (2005-–2014); some of them have been officially recognised by UNESCO. In the coming years, German development cooperation will further intensify communication at all levels – from global to national and from communal to individual – in order to raise awareness for biodiversity issues.

International Youth Forum: Go4Biodiv

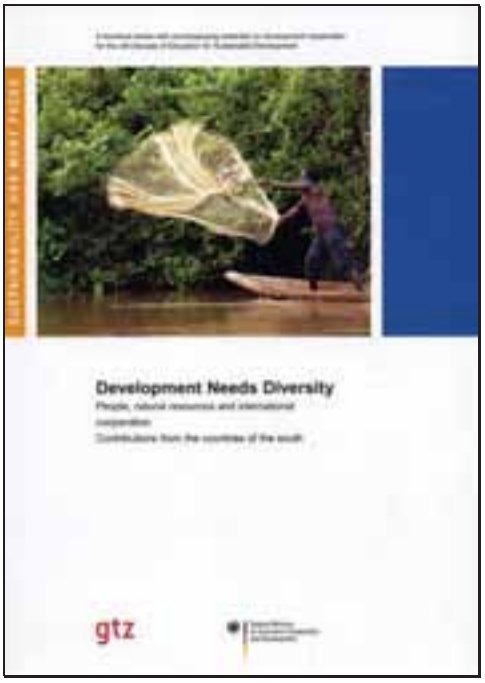
Young people will have to bear the consequences of today's actions and decisions – or lack of them. Their points of view should therefore play an important role at international conferences and in political decision-making. The first Youth Forum Go4BioDiv was held during COP 9 in Bonn, Germany, in 2008. The second event, which will take place in parallel to COP 10 in Japan (October 2010), is embedded in the broader framework of the UN Year of Biodiversity and the International Year for the Rapprochement of Cultures. It focuses on World Heritage Sites and aims at raising awareness about the interdependencies of biological and cultural diversity and inter-generational responsibility for the conservation of our global treasures. Around 50 young participants are offered the opportunity to reflect on their experiences and exchange views on Heritage Sites as the emblematic and visible flagships of nature conservation and the effects climate change has on these sites. This initiative carries on the achievements of the first Go4BioDiv event, which has led to the establishment of a very active network of highly committed young professionals from Africa, Asia, South America and some countries in Europe and North America. Many of them have returned to their home countries and are now playing an active role in environmental and educational campaigns, or are getting involved in protected area management and politics to promote sustainability.

Sustainability Has Many Faces: a series of multi-media brochures

Preserving biological and cultural diversity prepares the ground for human development – this is the key message of this multi-media series with richly illustrated texts and

accompaning materials on development cooperation. The publication offers ideas, contributions and suggestions on education for sustain-

able development both in and out of school. It is also part of German ODA's contribution to the UN Decade of Education for Sustainable Development. The brochures show how people in developing countries are finding ways of improving their living conditions, while at the same time learning to protect their environment. In these settings, development cooperation helps facilitate difficult processes of economic and social change. The publications have reached a large and diverse target audience, focussing on a wide range of important topics, such as protected area management, environmental communication, household energy, agrobiodiversity, as well as climate change and ecological footprints. The brochures also contain a variety of concrete case studies from countries such as Panama, Brazil, South Africa, Benin, Mauritania and Madagascar. They have reached teachers, trainers, facilitators and NGO group coordinators in Germany and also in many partner countries.



Video clips for the general public

Alongside traditional print media, German development cooperation is also making more and more use of other media. These include, for example, short video clips prepared by the Federal Ministry for Economic Cooperation and Development (BMZ) and GTZ under the simple heading 'Sustainability needs Diversity.' They are shown on video screens at 130 railway stations across Germany, with their messages reaching large numbers of people as they wait for their train. The clips are embedded in advertisements and news headlines. The content sends a positive message and highlights the urgent need to maintain biological diversity, showing strong cultural diversity and different livelihood systems. These clips have been running now for almost four years, reaching an estimated 2.5 million viewers a day.

Exhibitions

GTZ has put together a set of travelling exhibitions, which have been shown both in Germany and in partner countries, including in West Africa, Madagascar, China, India, and Brazil. The focus is always on people – in their role as users and preservers, but also destroyers, of biodiversity. The total number of people who have seen the exhibition is estimated at about two million, comprising all sectors of society. The highlight in recent years was a large exhibition in the German Parliament just prior to COP 9 in Bonn. The exhibitions consist of mobile, easy to carry roll-ups, and are offered to a broad variety of institutions such as museums, zoos, botanical gardens, and schools.

Bringing stakeholders together – Biodiversity Action Day

Biodiversity Action Day – a media partnership project in collaboration with GEO magazine that has been running since 2000 – is an ideal opportunity for German development cooperation to scale up a successful communication approach. The idea of the 'B-Day' is to demonstrate the importance of conserving biodiversity and its value for human well-being in a very practical and easy-to-understand way. For roughly two to four weeks around 22 May, a variety of people – communities, schools, museums, environmental groups, business people, politicians, journalists – are invited to come together and analyse and experience the living elements of carefully selected ecosystems. Participants are requested to monitor the diversity of plants and animals over a period of 24 hours, for instance on a mountain, along the coast, in a protected area or in an urban park. These action days have taken place annually for the last ten years, and were supported by GEO in Germany and by BMZ and GTZ in selected partner countries. In developing countries, the B-Days always explored a specific biodiversity-related topic: scientific partnerships (Colombia, 2001), useful plants (China, 2002), urban poverty (Brazil, 2003), traditional knowledge (Mali, 2005), coastal livelihoods (Honduras, 2006), climate change (Viet Nam, 2007), and agriculture (South Africa, 2008). In 2004, GEO and GTZ were invited to the United Nations headquarters in New York, where they presented a

stunning photo exhibition and organised a high-level panel discussion on the role of local communities in biodiversity conservation. The events have always resulted in greater attention being paid to biodiversity issues – for example in the media, in public opinion, in decision-makers minds, and even in governmental regulations.

2010 – from national events to a global movement

In 2010, the International Year of Biological Diversity, the German Environment Ministry (BMU) joined forces with BMZ and GEO to build upon these experiences and promote the B-Day idea globally. In conjunction with other partners, such as the German Federal Agency for Nature Conservation (BfN), KfW, the United Nations Environment Programme (UNEP), and the CBD Secretariat, they invited ministers of the environment and other government ministers around the world to organise a Biodiversity Action Day. A total of 37 developing and industrialised countries joined in and set up events of different scales looking at different ecosystems. All over the world, groups of 20 to 3000 people participated and were led by experts on taxonomy, ecology or environmental economics. All the events were covered by national media (TV, radio or print) – sometimes at prime time or in news headlines – and often included interviews on the value of biodiversity with local community members or environment ministers.

Internationally, the outcomes of these Action Days are being processed to form a global mosaic of ecosystems and the services and benefits they provide. Their stories, human faces and hands-on-experiences will complement and underpin the results of the recently launched TEEB study (The Economics of Ecosystems and Biodiversity). GEO magazine featured reports in 18 countries with over 10 million readers, and the results are reflected in a dedicated BMZ-BMU brochure. The events were also broadcast by Deutsche Welle television. The exciting discoveries and results of all the B-Days are expected to yield a long-lasting and broad communications outreach.

The ecological footprint: accounting for sustainability

Our whole life – irrespective of whether we live in cities or remote rural areas – depends upon the sustenance that the Earth's ecosystems provide us with. However, we are consuming nature's products and services at a rate that is considerably faster than what nature can sustainably produce: humanity currently uses over 40 % more ecological services than the Earth can renew, and industrialised countries are responsible for the lion's share of consumption. The growing world population, which could reach nine or ten billion by the middle of the century, is further exacerbating the demand for resources.

In addition to this, many of the inhabitants of emerging countries such as China, Brazil, Indonesia and India are emulating Western lifestyles, which are resource-intensive and unsustainable. Growing human capital (proficiencies, manpower, knowledge) and physical capital (housing, factories, railway lines) are also increasing the demands on nature. However, our natural capital is becoming increasingly scarce. Furthermore, climate problems are set to develop into a major threat to economic stability. The situation is serious and we need tools, data and scientific approaches that indicate where we stand. The ecological footprint is a way of ac-

counting for our planet's natural capital. The tool describes through scientific principles the supply of natural capital (biocapacity) and humanity's demand on it (ecological footprint). The greatest strength of this tool arguably is that it is able to reduce all types of human activities - such as production of food, travel or playing computer games - to a single measure: the ecological footprint. This image is extremely powerful.

When businesses, cities or countries recognise how much of nature they consume and how much they have at their disposal, they are able to make more informed decisions. In this sense, the ecological footprint gives us an easy-to-understand tool to describe, assess and manage these natural riches and safeguard our consumption of them. More and more organisations and institutions are using the footprint as an indicator in their reporting systems – from the Secretariat of the Convention on Biological Diversity (SCBD) through various UN institutions, the EU and Switzerland, right down to the German State of Bavaria. Users appreciate the footprint's capacity to reduce complexity.

Footprint data also makes global differences clearer and more tangible. Comparing the ecological footprint of an average resident of Germany, for example, with that of an average resident of Madagascar, who uses one fifth of the resources of someone in Germany, raises many questions. How do lifestyles in these countries differ? What do these disparities say about the global economy? But also, very simply: how do we want to live and what is important to us? The ecological footprint provides a guiding framework for sustainable development, since the limited availability of natural resources is increasingly becoming a decisive factor for economic success. Its data can be used to provide valuable indicators for governance of a country or community: how should policy interventions and investment priorities be set to reverse threatening trends? What do resource demand and natural capital mean for a country's stability and its ability to provide for the well-being of its people?

Thus, in cooperation with experts at the Global Footprint Network (GFN) and other partners, GTZ is promoting the use of the ecological footprint in development cooperation at various levels of decision-making. Specific focus is put on national and regional levels, but also on its application in environmental awareness campaigns. Since the methodology and especially the calculation of the comprehensive sets of underlying data are new, additional capacity has yet to be built for the footprint's application. Potential 'testing sites' for analysis and joint learning have been identified in Viet Nam and Peru. As part of GTZ's projects in the forestry sector in Viet Nam, an appraisal of the ecological footprint as a tool for sustainable management of forests was conducted in 2009. In Peru, an ongoing initiative is supporting the Ministry of Environment in adopting the footprint as a monitoring tool, along with other sustainability indicators. The footprint will be used as an indicator at national and regional levels.

In recent years, GTZ has been using the footprint intensively in the field of education for sustainable development. School teachers and students who frequently visit GTZ's headquarters in Eschborn take part in activities that help raise questions about their own lifestyle and its ecological impact. The footprint has also become part of the educational programme carried out at the International Wilderness Camp, a collaborative project between the Bavarian Forest National Park and GTZ and other organisations. In the depths of the Bavarian forests, a unique 'global village' has been built with the support of partnerships with protected areas in Benin, Mongolia, Viet Nam, Chile, Brazil and Venezuela. This village provides accommodation in the traditional style of many different countries and people staying there learn about the interdependencies of different sectors, businesses and nations, as well as about personal decisions for more sustainable lifestyles. The footprint serves as a metaphor, but also as a lesson to be learnt: humanity must adapt its resource consumption to what the Earth can supply. Otherwise, we will undermine the potential for our own well-being and that of future generations.

Germany's contributions to the Global Environment Facility (GEF)

The Global Environment Facility (GEF) is a partnership which provides grants and loans to developing countries and countries with economies in transition for projects related to biodiversity, climate change, international waters, land degradation (desertification), and chemicals. The GEF was established in 1991 in response to a Franco-German initiative and today it is the largest funder of projects to improve the global environment. So far, the GEF has allocated US$16.2 billion to environmental projects and programmes. This sum has been supplemented by US$70 billion in co-financing. By 2008, the GEF had supported more than 2,400 projects in over 165 developing countries and countries with economies in transition.

The GEF partnership includes 10 agencies: the UN Development Programme (UNDP), the UN Environment Programme (UNEP), the World Bank, the UN Food and Agriculture Organization (FAO), the UN Industrial Development Organization, the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank and the International Fund for Agricultural Development. The Scientific and Technical Advisory Panel provides technical and scientific advice to the GEF on its policies and projects.

GEF serves as the financial mechanism for the Convention on Biological Diversity (CBD), which provides guidance to GEF on assisting developing countries and countries with economies in transition in meeting their obligations under the Convention and generating global environmental benefits in the area of biodiversity. The GEF's biodiversity portfolio accounts for about one-third of the total GEF funding given to developing countries and to those with economies in transition. Since 1991 GEF has invested about US$2.8 billion in 790 projects that address the loss of globally significant biodiversity. This has been supplemented by about US$7.6 billion in co-financing.

To provide further guidance, the GEF has fifteen 'operational programs'. Five of these are related to biodiversity and one is a 'multifocal' programme:

- arid and semi-arid zone ecosystems,
- coastal, marine and freshwater ecosystems,
- forest ecosystems,
- mountain ecosystems,
- the conservation and sustainable use of biological diversity which is important to agriculture,
- integrated ecosystem management (multifocal programme).

In recent years the GEF has supported projects in the following priority areas in the field of biodiversity:

Protected Area Management: The GEF has been the largest investor in the creation and effective management of protected areas around the world – more than US$1.6 billion of GEF money has been directed to 1,600 protected areas covering 360 million hectares, which is greater than the size of India and amounts to almost 20 % of the total land area protected globally.

Conservation Trust Funds: The GEF is recognised as a pioneer in supporting more than 26 conservation trust funds worldwide, investing more than US$300 million in total.

Small Grants Programme (SGP): SGP supports projects led by non-governmental and community-based organisations in developing countries which demonstrate that community action can maintain the fine balance between human needs and environmental imperatives.

The programme is active in 122 countries and has awarded more than 12,000 grants worldwide. In GEF Council meetings, Germany has advocated placing more emphasis on SGP as a means to strengthen civil society.

Mainstreaming Biodiversity into Production Landscapes and Seascapes: The GEF supports efforts to remove the barriers that prevent public and private sector actors from mainstreaming biodiversity. This includes developing policy and regulatory frameworks that promote and reward mainstreaming and strengthening the capacities of resource managers to produce biodiversity-friendly goods and services.

Payment for Ecosystem Services: The GEF's biodiversity mainstreaming portfolio includes more than 30 projects that apply the Payment for Ecosystem Services (PES) mechanism. Within these projects, the GEF supports the design and implementation of PES schemes to compensate resource managers for off-site ecological benefits. Investments have been made in the development of national PES systems, regional or local schemes with investments from the private sector and public-private partnerships. The biodiversity-rich nation of Costa Rica, for example, once had the highest deforestation rate in Latin America, but as a result of a PES project, it now has the highest natural reforestation rate among all tropical countries.

National Biosafety Frameworks: The GEF supports the Cartagena Protocol on Biosafety (CPB) by providing financial assistance for the following activities: the development and implementation of National Biosafety Frameworks, participation in the Biosafety Clearing House and building the necessary capacities and raising public awareness to enable compliance with the CPB. The GEF has supported 130 countries in developing their National Biosafety Frameworks while promoting regional collaboration and the exchange of good practices. GEF has invested US$36 million in these measures.

Indigenous Communities: The GEF also provides assistance to indigenous and local communities. Indigenous communities access funds and participate in GEF-funded projects in the areas of biodiversity, sustainable land management, international waters, climate change and persistent organic pollutants (POPs). As a result of their close ties to land, forests, water, wildlife and other natural resources, they have been most involved in biodiversity activities. However, the number of sustainable land management projects involving indigenous peoples has also increased over the years. Indigenous communities have played a part in more than 100 projects at various levels.

Table. Commitments to the GEF by the international donor community and the German Contribution.

	New commitments (US$)	German contribution (US$)	
Pilot Phase 1991 – 1994	1,200 million	151 million	12.95 %
1st Replenishment 1994 – 1998	2,000 million	235 million	12.00 %
2nd Replenishment 1998 – 2002	1,900 million	220 million	10.66 %
3rd Replenishment 2002 – 2006	2,400 million	293 million	11.00 %
4th Replenishment 2006 – 2010	3,100 million	295 million	12.89 %
5th Replenishment 2010 – 2014	4,340 million	479 million	13.53 %
Total	**14,940 million**	**1,673 million**	**11-13 %**

Table. GEF Commitments by focal area from 2006 to 2014 (in million US$).

	GEF-4	GEF-5	Share in % (GEF-5)
Biodiversity	941 million	1,200 million	27.4
Climate protection	941 million	1,350 million	33.3
International waters	332 million	420 million	10.0
Land Degradation	279 million	400 million	9.5
Chemicals	319 million	420 million	10.0
Corporate Programmes (e.g. SGP), outreach, etc.	321 million	410 million	9.8
Total	**3,133** million	**4,200** million	**100.0**

In order to enhance country ownership, in 2009 the GEF Council adopted a System for the Transparent Allocation of Resources (STAR) to be applied in projects relating to biodiversity, climate change and land degradation. In accordance with this system, GEF resources are pre-allocated to countries based on their potential to generate global environmental benefits and the capacity of each country to successfully implement GEF projects, which is determined on the basis of different performance indicators.

The Sustainable Forest Management (SFM) Programme was established mid-way through the GEF-4 replenishment cycle and thus lacked dedicated funding. In GEF-5, there will be a separate funding envelope for the first time for SFM and the UN Reducing Emissions from Deforestation and Forest Degradation Plus programme (REDD+). This will be available for countries willing to invest portions of their biodiversity, climate change and land degradation allocations in SFM/REDD+ projects which will have a greater impact.

The GEF has been replenished with over US$16 billion in its 20-year history. Donors have agreed to a new record level of funding for the GEF's fifth replenishment period from 1 July 2010 to 30 June 2014. A total replenishment of US$4.34 billion has been achieved for GEF-5, which represents an increase in new donor funding of more than 50 % on GEF-4 levels.

Germany is the third-largest donor after the USA and Japan, contributing 11-13 % of the overall budget. Germany has committed over US$1.5 billion to the GEF since it was founded in 1991 (up to and including the end of the current replenishment period in 2014). The German contribution to the biodiversity focal area alone has been roughly US$500 million.

One of the cross-sectoral issues highlighted by Germany in the GEF Council is the promotion of sustainable forest management. In addition to playing a key role in climate change mitigation in relation to land-based emissions, forests are home to a significant percentage of the world's biodiversity wealth and are responsible for providing key ecosystem services, including functioning as carbon sinks and storehouses, as buffers against soil degradation and desertification, as well as sustaining the livelihoods of hundreds of millions of rural people worldwide. Thus it is clear that the conservation and management of forests can have multiple benefits if the different objectives can be pursued synergistically. In GEF-5, US$250 million have been allocated for this purpose. This will incentivise US$ 1 billion worth of investments in SFM/REDD+.

In addition to being the third-largest donor and playing an active role in the GEF Council, Germany also cooperates with the GEF at project level in several countries. For example, the GEF and KfW jointly funded the Madagascar Trust Fund for Sustainable Protection of Nature Reserves and KfW is cooperating with GEF and other organisations in the Amazon Region Protected Areas Programme (ARPA), which aims to protect 50 million hectares of the Brazil tropical rain forest. In Kazakhstan, GTZ is closely cooperating with the GEF on implementing a medium-sized project for rangeland management, which aims to preserve the unique biodiversity in the region, combat land degradation and generate income for rural people.

Equator Initiative

The Equator Initiative is a partnership that brings together the United Nations, governments, civil society, businesses, and grassroots organisations to build the capacity and raise the profile of local efforts to reduce poverty through the conservation and sustainable use of biodiversity. Started in 2002, the Equator Initiative evolved in response to the fact that the world's greatest concentrations of biodiversity are often found in countries that are also afflicted by the world's most acute poverty. It also takes account of the evolving trend of local leadership to advance innovative projects in biodiversity conservation and poverty reduction. The Equator Initiative is designed to celebrate successful local initiatives at the nexus between poverty and biodiversity, create opportunities for sharing community experiences and good practice, inform policy and foster an enabling environment for local action, and build the capacity of grassroots organizations to deliver results and upscale impact.

BMZ joined the Equator Initiative partnership in 2003 to underline the importance German development cooperation attaches to sustainable use of biodiversity as a means of reducing poverty. Other active partners in the Equator Initiative include: the Convention on Biological Diversity (CBD), Conservation International, Ecoagriculture Partners, Fordham University, the Norwegian Government, the World Conservation Union (IUCN), The Nature Conservancy, RARE, Television for the Environment (TVE), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the United Nations Foundation (UNF). Through its Small Grants Programme, the Global Environment Facility (GEF) closely co-operates with the Equator Initiative and focuses on financing activities at the local level.

The Equator Prize

Every two years, the Equator Initiative partnership awards the prestigious Equator Prize to outstanding local and indigenous community efforts to reduce poverty through the conservation and sustainable use of biodiversity. The Equator Prize is awarded to 25 local and indigenous community initiatives, each of which receives a monetary prize of US$5,000.

The 2010 Equator Prize is the fifth award cycle, giving it special relevance in the International Year of Biodiversity. The award ceremony will take place at a Heads of State dinner during the United Nations General

Assembly on 20 September at the American Museum of Natural History in New York. Having a focus on poverty alleviation and biodiversity conservation in Africa, BMZ financed all the 2010 prizes awarded to this continent. The German Development Minister will present the awards personally to all African community representatives. The award ceremony was once hosted in Germany by BMZ and GTZ – on the occasion of World Environment Day 2007. It took place at the Museum of Natural History in Berlin.

Equator Dialogues

Since its inception, the Equator Initiative partnership has supported community dialogue spaces, where leading representatives of the local and indigenous communities (most of which have received the Equator Prize at some time) participate in community-driven meetings that run in conjunction with international policy fora. At these dialogues, local communities shape the programme of work, lead policy sessions, and design a 'home base' from which they can make effective policy interventions. Central objectives are: peer-to-peer knowledge exchange, direct access to decision-makers and policy-making processes, leadership training, and grounding global policy development in local realities. The dialogue space has proved to be a successful model and is in high demand from local practitioners.

The Equator Initiative is organising a dialogue space in conjunction with the United Nations General Assembly in September 2010. This Community Summit focuses on local and indigenous contributions, looking not only at how they have assisted biodiversity conservation and poverty reduction, but also at ways in which they are helping to achieve the Millennium Development Goals (MDGs). The Community Summit will be attended by representatives from communities that have received awards in the 2010 Equator Prize and will include presentations, facilitated thematic discussions and debates, capacity building and training workshops, knowledge management and exchange exercises, as well as facilitated interventions during the High Level Segment on Biodiversity.

Like the Equator Prize, the Equator Dialogue space – the Community Dorf – was invited to the Conference of the Parties to the CBD (COP 9) in Bonn, Germany. Community representatives, including all actual Equator Prize winners, worked with partners of the Equator Initiative to offer workshops, events, and thematic days that addressed the following topics: indigenous and community conserved areas (ICCAs), biodiversity and business, access and benefit sharing (ABS), marine and coastal biodiversity conservation, and agricultural biodiversity. A representative from the Dorf (the community village) was selected to speak at the final plenary session of the COP on behalf of indigenous and local communities.

Equator Knowledge

The Equator Initiative is committed to leveraging the benefits its partnership provides, and conducting and documenting research on local best practices and lessons learnt in biodiversity conservation and poverty reduction. The Equator Initiative has conducted joint research on community-based natural resource management with a number of institutes, including Colombia University, the GEF Small Grants Programme (SGP), the International Development Research Council (IDRC), the International Institute for Environment and Development (IIED), Harvard University, the Kennedy School of Government, the Secretariat to the Convention on Biological Diversity (SCBD), and the World Resources Institute (WRI).

The Equator Initiative website features in-depth profiles on the 128 recipients of the Equator Prize, including key community activities and innovations, biodiversity impacts, socioeconomic impacts, policy impacts, successes/challenges with replication, and partnerships. Throughout the International Year of Biodiversity, the Equator Initiative has been working with partners to build its knowledge base and has developed several knowledge products for each community: an MDG poster that charts local conservation efforts and project results that contribute to the achievement of the Millennium Development Goals (MDGs), and a photo story, which is a slide show with audio community narration that guides viewers through the project. The partnership also maintains the Equator Knowledge Zone (EKZ), a database of 1,700 local and indigenous good practices in biodiversity conservation, poverty reduction and adaptation to climate change.

Through GTZ, German development cooperation worked closely with the Equator Initiative to develop the above-mentioned MDG poster tool kit and interactive software, which allows communities to develop an MDG poster in only a few short steps, both online

and offline. The tool has subsequently been adopted and further developed by other environmental and development organisations, including IUCN, The Nature Conservancy (TNC), and the Secretariat to the Convention on Biological Diversity (SCBD).

The Community Knowledge Service

The Equator Initiative has also developed the Community Knowledge Service (CKS), an important and growing platform for community-to-community knowledge exchange that builds on the successful contacts made at the community dialogue spaces. It was developed in response to a consistently articulated need from local practitioners for greater investment in long-term relationship building and knowledge sharing processes. CKS is a vision for an international movement of local and indigenous practitioners, connected by face-to-face and virtual knowledge sharing platforms. It empowers communities to document and share expertise (bilaterally and with national, regional and international policymakers) and to apply newly acquired knowledge, as well as to upscale best practice in biodiversity conservation, poverty reduction, and adaptation to climate change.

A range of knowledge sharing tools and processes have been identified as useful for advancing CKS objectives, including peer-to-peer learning exchanges (site visits), case studies, participatory video, radio programmes, posters, village knowledge centres ('learning farms'), and community dialogue spaces. Similarly, a range of capacity building processes and training activities have been identified as useful for advancing CKS objectives, including leadership training, institutional mapping, ecosystem-based action plans, technical and capacity building workshops, as well as participatory video production, and monitoring & evaluation (M&E) training.

In September 2006, GTZ hosted a CKS inception meeting and workshop in Berlin, Germany. The workshop was designed to enable the group of 23 community leaders and partner representatives to collectively develop a common vision for the CKS. The results of this meeting helped to establish the foundations of what is now an initiative that generates considerable interest and has gained substantial momentum.

List of Ongoing Biodiversity Projects

This section lists all ongoing projects and programmes within the framework of German Development Cooperation related to biodiversity. The list distinguishes between three groups of projects:

- Projects which directly promote the conservation and sustainable use of biodiversity and/or the equitably sharing of benefits arising from biodiversity;
- Projects in which at least one component focuses on the economic utilisation of natural resources and at the same time promote the conservation of biological diversity;
- Projects that do not primarily focus on natural resources management but include activities dealing with the conservation and sustainable use of biological diversity.

The decision as to which project should be allocated to which group was not always easy and unambiguous. Project documents, information obtained from project managers and personal knowledge helped in many cases allocate the projects. Nevertheless, the final decision on the allocation remained sometimes somewhat subjective.

An attempt was made to compile all biodiversity-related projects oif German Development Cooperation as far back as 1975. The main list contains ongoing projects as per June 2010.

Completed projects were compiled in a separate list which is available on request.

When a project consists of multiple project phases, all phases are listed under the same project title, even if the previous phases were conducted under different project numbers. In those cases where the project title changed, cross-references are given.

The lists gives, whenever possible and available, the actual project starting date and the actual closing date. The year of commitment, and the foreseen starting and closing dates have not been taken into account.

For DED and CIM activities primarily involving the assignment of experts (human resources cooperation), the number of experts dispatched is given instead of the funding volume.

The projects have been grouped into five clusters:

- Mediterranean, North Africa, Middle East, Transition Countries;
- Sub-Saharan Africa;
- Asia and Pacific;
- Latin America;
- Supraregional projects.

Partner countries within each region are listed alphabetically.

Explanation:

■■■ Projects or programmes which have as their goal the conservation of biological diversity and the sustainable use of its components

■■ Projects or programmes in which the economic utilisation of natural resources is to be the fore but which at the same time promote the conservation of biological diversity

■ Projects with individual measures and activities that involve the conservation and sustainable use of biological diversity

Mediterranean, North Africa, Middle East, Transition Countries

Regional Projects and Programmes

The German Government supports regional approaches in natural resource management in three geographic regions: Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan), the South Caucasus (Armenia, Azerbaijan and Georgia) and some countries of the the MENA region (Algeria, Lebanon, Morocco, Syria, Tunisia, Turkey).

■■■ **Sustainable Use of Natural Resources in Central Asia**
Regional programme targeting Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan
See also CIM and DED experts in Kazakhstan

GTZ Project term: 2009-2015
Funding volume: € 8.17 million

■■ **Adaption of Forest Policies to Climate Change in the Mediterranean Region**
Regional programme targeting Algeria, Lebanon, Morocco, Syria, Tunisia, Turkey

GTZ Project term: 2009-2013
Funding volume € 4.00 million

■■■ **South Caucasus Protected Areas Fund Trust Fund**
Tri-national trust fund to support selected protected areas in Armenia, Azerbaijan and Georgia

KfW Project term: 2006-2007 (continuous)
Funding volume € 5.00 million

■■■ **Support to the Transboundary Joint Secretariat for Nature Conservation in the South Caucasus**
The Transboundary Joint Secretariat coordinates FC operations in Armenia, Azerbaijan and Georgia within the frame of the South Caucasus Conservation Project

KfW Project term: 2007-2011
Funding volume € 1.50 million

■■■ **Sustainable Management of Natural Resources in the South Caucasus**
(Biodiversity in Protected Areas and Forests)
Armenia: Ministry of Nature Protection; *Azerbaijan*: Ministry of Ecology and Natural Resources; *Georgia*: Ministry of Environment Protection and Natural Resources.

GTZ Project term: 2008-2011
Funding volume € 6.75 million

■■■ **Regional Environmental Policy in the South Caucasus**
Harmonization of national environmental legislation (including biodiversity conservation) with EU policy
Armenia: Ministry of Nature Protection; *Azerbaijan*: Ministry of Ecology and Natural Resources; *Georgia*: Ministry of Environment Protection and Natural Resources.

InWEnt Project term: 2008-2011
Funding volume € 2.26 million

Albania

■■■ **Prespa Basin Conservation Project: Transboundary Ecosystems Conservation and Integrated Resource Management Programme**
The project is jointly implemented with the Global Environment Facility (GEF co-financing); additional component on the Macedonian side.

KfW Project term: 2010-2015
Funding volume € 3.56 million

Armenia

Armenia participates in the South Caucasus natural resource management programme supported by the German government (see also under regional programmes).

■■■ **Eco-Regional Conservation Programme: National Park Javakheti/Arpi**
Ministry of Ecology and Natural Resources

KfW Project term: 2007-2011
Funding volume € 2.20 million

■■■ **Integrated Experts**

CIM
- American University of Armenia, Environmental Conservation & Research Center (ECRC): One Integrated Expert for usage of GIS in natural resource management (2008-2010)
- Foundation for the Preservation of Wildlife and Cultural Assets: One Integrated Expert as coordinator (2009-2011)

Azerbaijan

Azerbaijan participates in the South Caucasus natural resource management programme supported by the German government (see also under regional programmes).

■■■ **Eco-Regional Conservation Programme: National Park Samur-Yalama**
Ministry of Ecology and Natural Resources, in cooperation with the ministries for tourism, urban development and agriculture

KfW Project term: 2007-2011
Funding volume € 2.55 million

Belarus

■■■ **Integrated Experts**

CIM BirdLife Belarus (APB): One Integrated Expert for biodiversity and climate change (2008-2010) and another for renaturation of wetlands (2008-2010)

Egypt

■■■ **Integrated Experts**

CIM Ministry of State for Environmental Affairs, Nature Conservation Sector: One Integrated Expert for protected areas (2009-2011) and another for biodiversity assessments (2008-2010)

Georgia

Georgia participates in the South Caucasus natural resource management programme supported by the German government (see also under regional programmes).

■■■ **Eco-Regional Conservation Programme: National Park Javakheti**
Ministry of Environment Protection and Natural Resources

KfW Project term: 2007-2011
Funding volume € 2.25 million

■■■ **Integrated Experts**

CIM
- WWF Caucasus Programme Office: One Integrated Expert for sustainable forest management (2010-2012)
- Ministry of Environment Protection and Natural Resources of Georgia: One Integrated Expert for biodiversity (2007-2011) and 1 expert for environmental policy (2009-2012)

Kazakhstan

Kazakhstan participates in the programme on sustainable use of natural resources supported by the German government. See under regional projects.

■■■ **Integrated Experts**

CIM
- The Association for the Conservation of Biodiversity in Kazakhstan (ACBK): Two Integrated Experts for biodiversity (2007-2012 / 2009-2011), one for awareness building (2006-2010), and another for coordinating environmental projects (2004-2011)
- Central Asian Regional Environm,ental Centre (CAREC): One Integrated Expert for program development funded by BMU (2009-2011)

Lebanon

■■ **Environmental Fund**
The measures promoted by the Fund partially target protected areas and other aspects of biodiversity and natural resource management. Project executing organisation: Council for Development and Reconstruction.

GTZ Project term: 2007-2012
Funding volume € 8.50 million

FR Macedonia

■■■ **Prespa Basin Conservation Project: Transboundary Ecosystems Conservation and Integrated Resource Management Programme**
The project is jointly implemented with the Global Environment Facility (GEF co-financing); additional component on the Albanian side.

KfW Project term: 2010-2013
Funding volume € 1.53 million

Morocco

■■■ **Conservation of Nature and Combating Desertification in Morocco**
High Commissioner's Office for Water, Forest and Combating Desertification (HCEFLCD)

GTZ Project term: 2006-2011
Funding volume € 6.67 million

Tajikistan

■ **Human Resources Cooperation**

CIM
- NGO “Nature Protection Team" (NPT): One Integrated Expert for community-based wildlife management (2008-2011)
- State Committee for Environmental Protection: One Integrated Expert for coordination and monitoring (2009-2011)
- The Tajik main component of the regional program, the Khorog based project “Sustainable use of natural resources in Gorno Badakhshan” is supported by an Integrated Expert working on forestry management (2010-2012).

Yemen

■■■ **Biodiversity Management**

Ministry of Water and Environment

CIM One Integrated Expert as coordinator (2010-2012)

Sub-saharan Africa

Regional Projects and Programmes

The German Government supports regional approaches in two geographic areas: southern Africa within the scope of SADC and the Congo Basin within the scope of COMIFAC.

■■ **Regional SADC Programme for Sustainable Forest Management**

(former project title: Community-based Dry Forest Management)

South African Development Community (SADC): Directorate for Food, Agriculture and Natural Resources (FANR)

GTZ Project term: 1992-2011
Funding volume € 9.71 million

■■■ **Transfrontier Conservation Areas (TFCA): Limpopo Project**

The *South African Development Community* (SADC) is the political project partner. The project is executed by the *Direcção Nacional de Florestas e Fauna Bravia*, Mozambique.

KfW Project term: 2002-2011
Funding volume € 12.00 million

■■■ **Transfrontier Conservation Areas (TFCA): Kavango-Zambezi Project (KAZA)**

The *South African Development Community* (SADC) is the political project partner. Current implementation focus in Angola and Zambia.

KfW Project term: 2010-2014
Funding volume € 8.00 million

■■■ **Support to the Commission des Forêts de l’Afrique Centrale (COMIFAC)**

Members are Burundi, Cameroun, Central African Republic, Chad, Congo, DR Congo, Gabon, Guinée Équatoriale, Rwanda, and Sao Tomé & Principe.

GTZ Project term: 2005-2010
Funding volume € 6.00 million

■■■ **Central Africa Forestry Convergence Plan: a Regional Sustainable Forest Management Initiative**
Commission des Forêts d'Afrique Centrale (COMIFAC)

KfW Project term: 2011-2016 (in preparation)
Funding volume € 10.00 million

■■ **Strengthening Capacity for Effective Implementation of Payments for Watershed Services Providing Equitable Benefits to Local Communities in the Congo Basin**
World Wide Fund for Nature (WWF)

WWF Project term: 2010-2011;
Funding volume € 0.47 million

■■■ **Capacity Building Programme for an Africa-wide Biosafety System**
Commission of the African Union

GTZ Project term: 2005-2010
Funding volume € 2.00 million

■■■ **Capacity Building for sustainable management of forest resources in the Congo Basin**
RIFFEAC - Network of forest and environmental education institutions of Central Africa

InWEnt Project term: 2009-2013
Funding volume € 1.80 million

■ **River Basin Dialogue**
Capacity Building programme for integrated land and water management in SADC shared watercourse institutions. Several measures are directly related to nature conservation, environmental management and wetland ecosystems management. Partners: SADC river basin organisations and national ministries, NGOs.

InWEnt Project term: 2008-2011
Funding volume € 2.20 million

Benin

■■■ **Conservation and Management of Natural Resources Programme (ProCGRN)**
Ministere de l'Agriculture, de l'Elevage et de la Peche (MAEP)

GTZ Project term: 2003-2010
Funding volume: € 25.05 million

KfW Project term: 2005-2014
Funding volume: € 7.00 million

DED One expert for ecotourism development

■■■ **Management of the Pendjari National Park**
The TC component was in 2002 integrated in the "Conservation and Management of Natural Resources Programme" (ProCGRN"). See also under completed projects. Project executing agency: Centre national de gestion des ressources de faune (CENAGREF).

KfW Project term: 2000-2012
Funding volume € 7.67 million

DED two experts with the «Union des Associations Villageoises de Gestion des Réserves de Faune" (2010-2013)

Botswana

■■■ **Community Forestry and Developing a Community-based Bush Fire Management**
Ministry of Environment, Wildlife and Tourism: Department of Forestry and Range Resources

DED Two experts (2009-2012).

Cape Verde

■■■ **Conservation of Natural Resources Fogo**
Ministério da Agricultura e Ambiente (MAA)

KfW	Phase I:	Project term:	2003-2007	Funding volume:	€ 1.54 million
	Phase II:	Project term:	2007-2011	Funding volume	€ 4.40 million

Cameroon

■■■ **Programme for Sustainable Management of Natural Resources (PSMNR)**
Support to the Implementation of the National Forestry Programme
Ministry of Forestry and Wildlife [Ministère des Forêt et de la Faune] (MINFOF) and Ministry of Environment and Nature Protection (MINEP); FC is focused in the south-west region "Programme for Sustainable Management of Natural Resources in the SW Region (PSMNR-SW)"; TC: Programme d'Appui au Programme Sectoriel Forêt et Environnement (ProPSFE).

GTZ	Project term:	2003-2010	**KfW**	Project term:	2004-2012
	Funding volume	€ 15.73 million		Funding volume	€ 7.00 million

DED Altogether 8 experts with various executing organisations including Ministère des Forêts et de la Faune (MINFOF). Activity areas include Mount Cameroon National Park, Korup National Park, Takamanda Moné Nationalpark and other protected areas.

■■ **Forestry Sector Programme**
Ministry of Forestry and Wildlife [Ministère des Forêt et de la Faune] (MINFOF); basket funding together with other donors

KfW	Project term:	2011-2015 (in preparation)
	Funding volume	€ 17.00 million

■■■ **Sustainable Financing of Tri-National de la Sangha (TNS) Lobecke National Park**
Ministère des Forêt et de la Faune (MINFOF)

KfW	Project term:	2005-2010
	Funding volume	€ 5.00 million

■■ **Community based Buffer Zone Management in Forest Reserves**

CIM CASDNREP: a coordinator for sustainable development of natural resources [Returning Experts Programme]

Central African Republic

■■■ **Conservation of the Parc Tri-National du Sangha Bayanga ('Dzanga-Sangha')**
Political partner is the Commission des Forêts d'Afrique Centrale (COMIFAC). The project is executed by Ministère des Eaux et Forêts, de la Chasse et de la Pêche, chargé de l'Environnement (MEFCPE). See Republic of Congo for the Nouabale-Ndoki section of the park.

GTZ	Project term:	1994-2009	**KfW**	Project term:	2011-2016 (in prep.)
	Funding volume	€ 12.71 million		Funding volume	€ 10.00 million

Congo, Democratic Republic

■■■ **Programme "Biodiversity Conservation and Sustainable Forest Management"**
The TC component is a continuation of the projects "Intregrated Nature Conservation in Kahuzi-Biega National Park" and "Advisory Services to the Nature Conservation Authorities" (see under completed projects). Project executing organisation: Ministère de l'Environnement.

GTZ	Project term:	2005-2010	**KfW**	Project term:	2008-2012
	Funding volume	€ 12.25 million		Funding volume	€ 11.00 million

Congo, Republic

■■■ **Conservation of the Parc Tri-National du Sangha (Nouabale-Ndoki section)**
For the Bayanga section of the park, see under Central African Republic.

KfW Project term: 2011-2016 (in preparation)
Funding volume € 14.00 million

Côte d'Ivoire

■■■ **Conservation of the Taï National Park**
Continuation of the "sectoral program forest management and nature conservation". Project executing organisation: Ministère de l'Environnement et des Eaux et Forêts. Starting in 2010, the project will be merged with the "Economic Development Programme". The new name will be "Rural Economic Development and Conservation of the Taï National Park" (TC: 2010-2013, € 7.23 million)

GTZ Project term: 1997-2010
Funding volume € 9.19 million

KfW Project term: 2002-2013
Funding volume € 6.55 million

Ethiopia

■ **Sustainable Land Management (SLM) Programme**
The programme is building on an earlier programme, the Sustainable Utilisation of Natural Resources (SUN) (see under completed projects). Project executing organisation: Ministry of Agriculture and Rural Development.

GTZ Project term: 2008-2011
Funding volume € 13.10 million

KfW Project term: 2010-2014
Funding volume € 13.28 million

■■■ **Integrated Expert**
Jimma University - College of Agriculture and Veterinary Medicine

CIM Lecturer in Natural Resource Management Department [Returning Experts Programme]

Ghana

■■■ **Integrated Expert**
West African Primate Conservation Action (WAPCA)

CIM One Integrated Expert as project coordinator (2007-2011)

Kenya

■■■ **Integrated Experts**

CIM
- Kenya Agricultural Research Institute (KARI): Senior Researcher for Natural Research Management [Returning Experts Programme]
- World Agroforestry Centre (ICRAF): One Integrated Expert – Researcher for Agroforestry (2008-2012)

Madagascar

■■■ **Programme "Conservation and Sustainable Use of Natural Resources"**
Ministère de l'Environnement et des Eaux et Forêts

GTZ Project term: 2005-2011
Funding volume € 20.10 million

KfW Project term: 2008-2012
Funding volume € 5.00 million

■■■ **Environmental Action Plan IV: Environmental Education**
Ministry of Culture

KfW Phase I: Project term: 1998-2002 Funding volume: € 2,05 million
Phase II: Project term: 2003-2011 Funding volume: € 1.53 million

■■■ **Environmental Action Plan V: Ecological Region Kirindy and Tsimanampetsotsoa**
Ministère de l'Environnement et des Eaux et Forêts - ANGAP

KfW Project term: 2004-2012
Funding volume € 5.00 million

■■■ **Environmental Action Plan VI: Support for Private Approaches in Ecotourism**
Ministère de l'Environnement et des Eaux et Forêts - ANGAP

KfW Project term: 2010-2015
Funding volume € 2.00 million

■■■ **Madagasy Nature Conservation Fund Support to Conservation Endowment Fund**
Fondation des Aires Protegées et de la Biodiversité

KfW Project term: 2008-2011
Funding volume € 5.00 million

■■■ **National Parks Investment Fund**
Ministère de l'Environnement et des Eaux et Forêts - ANGAP

KfW Project term: 2007-2013
Funding volume € 7.00 million

Mauritania

■■■ **Natural Resource Management Programme**
FC is focused in the region of Guidimakha. One of the main components of TC deals with Banc d'Arguin National Park. Project executing organisation: Ministère Délégué auprès du Premier Ministre chargé de l´Environnement et du Développement Durable (MDEDD), Ministère du Développement Rural (MDR)

GTZ Project term: 2004-2011
Funding volume € 16.34 million

KfW Project term: 2005-2010
Funding volume € 4.00 million

■■ **Sustainable Management of the Fishery Ressources**
(previously: Establishment of a Fisheries Monitoring System)
Ministère des Pêches et de l'Économie maritime (MPEM) with Délégation à la Surveillance des Pêches et au Contrôle en Mer (DSPCM)

GTZ Project term: 1989-2010
Funding volume € 15.84 million

KfW

Phase I:	1990-1995	€ 4.14 million
Phase II:	1996-2002	€ 12.80 million
Phase III:	2003-2010	€ 4.80 million
Phase IV:	2011-2012 (in preparation)	€ 3.80 million

Namibia

■■■ **Biodiversity and Sustainable Land Management**
Ministry of Environment and Tourism (MET), Directorate of Environmental Affairs

GTZ Project term: 2008-2012
Funding volume € 3.57 million

■■ **Communal Forestry in Northeastern Namibia**
Department of Forestry (DoF) of Ministry of Agriculture, Water and Forestry (MAWF)

KfW Project term: 2004-2012
Funding volume € 5.55 million

DED 9 experts with local forestry missions and community administrations

■■■ **Bwabwata Mudumu and Mamili National Park**
Ministry of Environment and Tourism, Directorate of Environmental Affairs

KfW Project term: 2004-2012
Funding volume € 6.00 million

■■■ **Human Resource Cooperation**

DED Strengthening the Management of Conservancies and Community Forests: one expert with Namibia Nature Foundation (NNF) (2008-2011)

CIM One Integrated Expert (engineer for road construction and biodiversity) with Ministry of Environment and Tourism

Rwanda

■■■ **Conservation and Sustainable Utilisation of Natural Resources**

Association pour la protection de l'environnement et la promotion de l'agriculture (NGO)

DED One expert for protected area management

Senegal

■ **Advisory for Protection and Management of Natural Resources**

Ministère de l'Environnement

GTZ Project term: 1996–2010
Funding volume € 2.91 million

South Africa

■■ **Mpumalanga Rural Development Programme (MRDP)**

(One of the three project components is related to protected areas)

Office of the Premier, Mpumalanga Province

GTZ Project term: 2002-2010
Funding volume € 15.05 million

■■ **Remote Sensing of Natural Resources**

CIM
- South African National Biodiversity Institute: One Integrated Expert for Remote Sensing (2008-2010)
- GeoTerraImage (Pty) Ltd.: One Integrated Expert for Remote Sensing (2009-2010)

Tanzania

■■■ **Selous Niassa Wildlife Corridor**

Ministry of Natural Resources, Wildlife Division

KfW Project term: 2007-2012
Funding volume € 5.00 million

Asia and Pacific

Regional Projects and Programmes

■■■ **Biodiversity and Climate Change in the ASEAN Region**
ASEAN (Association of Southeast Asian Nations) Centre for Biodiversity

GTZ Project term: 2009-2011
Funding volume € 2.00 million

■■ **Southeast Asian Forest Programme**
ASEAN (Association of Southeast Asian Nations)

GTZ Project term: 2003-2010
Funding volume € 5.10 million

■ **Regional Management of Natural Resources in the Hindu Kush-Himalayas**
ICIMOD (International Centre for Integrated Mountain Development)

GTZ	Project term:	1986-1998	Funding volume	€ 6.94 million
		1996-2002	Funding volume:	€ 4.81 million
		2002-2008	Funding volume:	€ 4.75 million
		2003-2008	Funding volume:	€ 0.50 million
		2008-2012	Funding volume:	€ 6.00 million

■■ **Mekong Basin Watershed Rehabilitation Programme / Sustainable Management of Natural**
Resources in the Lower Mekong Basin
(Rehabilitation and Management of Watersheds in the Lower Mekong Basin)
Mekong River Commission Secretariat (MRCS) / Water Resources & Environmental Agency

GTZ	Project term:	1992-2011	**KfW**	Project term:	2010-2016 (in prep.)
	Funding volume	€ 17.65 million		Funding volume	€ 5.10 million

■■ **Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC)**
CIM
- One Integrated Expert for training in community-based forestry (2010-2012)
- One Integrated Expert for resource conflict management (2009-2011)

Bangladesh

■■■ **Securing Biodiversity in the Wetlands of the Pabna District**
Department of Fisheries

GTZ Project term: 2009-2012
Funding volume € 3.50 million

■■■ **Community-based Afforestation and Forest Management (Chunati Wildlife Sanctuary)**
Ministry of Environment and Forests

GTZ Project term: 2009-2014
Funding volume € 2.50 million

China, People's Republic of

■■■ **Sustainable Management of Agrobiodiversity in the Provinces of Hainan und Hunan**
Ministry of Agriculture

GTZ Project term: 2005-2010
Funding volume € 6.10 million

■■■ **Wetland Biodiversity Conservation in China (WEB)**
State Forest Administration (SFA)

GTZ Project term: 2010-2014
Funding volume € 3.00 million

■■ **Sustainable Forest Management**
State Forestry Administration (SFA); TC: China National Forestry Economics and Development Research Center (FEDRC); FC (focus on Guizhou province): Forest Department of Guizhou Province.

GTZ Project term: 2008-2011
Funding volume € 3.00 million

KfW Project term: 2007-2014
Funding volume € 4.50 million

■■ **Yangtse Basin Afforestation & Sustainable Forestry Programme**
State Forestry Administration (SFA)

KfW Project term: 1998-2010
Funding volume € 29.60 million

■■■ **Biosafety**
A measure funded by the project "Implementing the Biodiversity Convention"
Nanjing Institute of Environmental Science (NIES)

GTZ Project term: 2009-2011
Funding volume € 0.10 million

■■ **Integrated Experts**

CIM
- Kunming Institute of Botany, Chinese Academy of Science: Advisor for Biodiversity: (2005-2011);
- Yunnan Environmental Protection Department (YEPD): Community-based management of biodiversity (2003-2011);
- Office of Mountain River Lake Regional Development Committee (MRLDO): Ecosystem management of Poyang Lake (2008-2011);
- Promotion Association for Mountain- River-Lake Regional Susta Development of Jiangxi Province: Natural resource management related to the Living Lake Network (LLN) 2008-2011).

Indonesia

■■■ **Management of Kayan Mentarang National Park (KMNP)**
WWF Indonesia in collaboration with the Ministry of Forestry

GTZ Project term: 2004-2010
Funding volume € 1.55 million

■■ **Forest and Climate Programme – Reduced Emissions from Deforestation and Degradation**
Ministry of Forestry / Local administrations

GTZ Project term: 2009-2012
Funding volume € 7.75 million

KfW Project term: 2010-2011 (in prep.)
Funding volume € 20.00 million

■■ **Debt for Nature Swap III**
Ministry of Forestry

KfW Project term: 2010-2013
Funding volume € 6.25 million

■■■ **Supporting Indigenous Communities to Negotiate Agreements based on FPIC in the forestry sector** (A measure funded by the project "Implementing the Biodiversity Convention")
Aliansi Masyarakat Adat Nusantara (AMAN)

GTZ Project term: 2008-2011
Funding volume € 0.15 million

■■ **Human Resource Cooperation**

CIM
- Syiah Kuala Universität, Aceh: Lecturer for Marine Biology (two experts) and for Biology, Plant Ecology and Plant Taxxonomy (one expert) [Returning Experts Programme];
- Municipality of Balikpapan: One expert in the field of Environment and Nature Conservation [Returning Experts Programme];
- Tanjungpura University, Faculty of Forestry: One Integrated Expert on forestry and wildlife management (2006-2011).

DED **Sustainable Forestry Programme**
- Establishing a Forestry Programme for DED;
- Forest Planning and Community Forestry Development Westkalimantan: four experts;
- Accelerated Sustainable Forest Development Tarakan: two experts;
- Capacity Development Trainingscentre Forestry Samarinda: one expert;
- Community Based Forestry Development Malinau: two experts.

Laos

■■ **Climate Protection through Avoided Deforestation Programme (CLiPAD)**

Ministry of Agriculture and Forestry

GTZ	Project term:	2009-2012	**KfW**	Project term:	2010-2017 (in prep.)
	Funding volume	€ 2.00 million		Funding volume	€ 4.00 million

Mongolia

■■■ **Climate Change and Biodiversity: Conservation and Sustainable Management of Natural Resources** (emerged from the project "Nature Conservation and Buffer Zone Development")

Ministry for Nature and the Environment (MNE)

GTZ	Project term:	2002-2011
	Funding volume	€ 15.10 million

■■■ **Human Resource Cooperation: Natural Resource Management**

DED
- Participative Resource Management in Forest Areas of Northern Mongolia (various executing organisations including the Ministry for Nature and Environment, University of Darkhan and NGOs): five experts;
- Decentralized resource management: one expert.

Nepal

■■ **Advisory Services to Forest User Groups**

Community Forest User Association of the District Parbat in West Nepal

DED One expert 2009-2011

Philippines

■■■ **Sustainable Management of Natural Resources Programme**

Successor of the projects "Visayan Sea Coastal Resources Management Programme" and "Leyte Island Programme for Sustainable Management of Natural Resources" (see under completed projects) under a programmatic approach. Various executing agencies including Department of Environment and Natural Resources, Department of Agriculture, Department of Agrarian Reform, Local Government Units (LGU) of Leyte and Southern Leyte.

GTZ	Project term:	2005-2012
	Funding volume	€ 24.21 million

■■ **Forest Management Visayas**

Department of Natural Resources and Environment & Provincial Administration

KfW	Project term:	2008-2014
	Funding volume	€ 7.00 million

■■■ **Programme for the Conservation of Coastal and Marine Ecosystems**

DED

- Integrated Coastal Zone Management: one expert;
- Coastal Zone Management in the regions of Cadiz, Negros South, and the Bay of Lanuza: three experts;
- Promotion of sustainable use of forests and mangrove forests in Panay und Negros: two experts;
- Establishment of a marine protected area and promotion of alternative income for the local population on Samal Island: two experts.

Viet Nam

■■■ **Programme "Capacity Building for Sustainable Forest Management and Biodiversity"**
Ministry of Agriculture and Rural Development (MARD)

GTZ Project term: 2007-2010
Funding volume € 2.00 million

■■ **Sustainable Forest Management Programme**
Ministry of Agriculture and Rural Development (MARD)

GTZ Project term: 2005-2011
Funding volume € 8.50 million

■■■ **Conservation of Biodiversity in Forest Ecosystems**
Ministry of Agriculture and Rural Development (MARD)

GTZ Project term: 2009-2012
Funding volume € 3.00 million

■■■ **Sustainable Development of Coastal Forests in the Province of Bac Lieu**
Provincial People's Committee (PPC) of the Province of Bac Lieu

GTZ Project term: 2008-2011
Funding volume € 1.60 million

■■■ **Forest Development in Hoa Binh and Son La**
Ministry of Agriculture and Rural Development (MARD)

KfW Project term: 2008-2015
Funding volume € 10.00 million

■■■ **Sustainable Management of Natural Resources (Phong Nha-Ke Bang National Park)**
(Integrated Nature Conservation and Sustainable Use of Natural Resources in the Nha-Ke Bang National Park)
Province Peoples Committee (PPC) of the Province of Quang Binh, Department for Planning and Investment

GTZ Project term: 2007-2010
Funding volume € 1.80 million

KfW Project term: 2008-2016
Funding volume € 12.63 million

■■■ **Management of Natural Resources in the Coastal Zone of Soc Trang Province**
(Capacity Building for Collaborative Management of Coastal Protected Wetlands in Soc Trang Province)
Provincial People's Committee (PPC) of the Province of Soc Trang

GTZ Project term: 2007-2010
Funding volume € 3.63 million (including € 1.63 million from AusAID for the Biosphere Reserve in the Kien Giang Province)

■■ **Environmental Protection and Management of Natural Resources in the Province of Dak Nong**
Provincial People's Committee (PPC) of Dak Nong Province

GTZ Project term: 2008-2011
Funding volume € 2.40 million

■ **Afforestation III: Bac Giang, Quang Ninh and Lang Son**
Ministry of Agriculture and Rural Development (MARD)

KfW Phase I: Project term: 1999-2007 Funding volume: € 5.10 million
Phase II: Project term: 2006-2010 Funding volume: € 2.56 million

■ **Afforestation IV: Thanh Hoa and Nghe An**
Ministry of Agriculture and Rural Development (MARD)

KfW Project term: 2006-2010
Funding volume € 7.67 million

■ **Afforestation VI: Forest Rehabilitation and Sustainable Forest Management in Quang Nam, Quang Ngai, Binh Dinh and Phu Yen**
Ministry of Agriculture and Rural Development (MARD)

KfW Project term: 2006-2016
Funding volume € 9.71 million

■ **"Quick Win" Afforestation**
Ministry of Agriculture and Rural Development (MARD)

CIM Project term: 2006-2010
Funding volume € 3.00 million

■■■ **Human Resources Cooperation in Conservation on Management of Natural Resources**

CIM
- Department of Agriculture and Rural Development (DARD) Kon Tum Province: One Integrated Expert for forest and biodiversity management (2009-2011)

DED
- Support to the management of forests and protected areas: four experts;
- Protection of climate and natural resources (Pu Hu Forestry Mission): one expert.

Latin America

Regional Projects and Programmes

■■■ **Tropical Forest Conservation in the Amazon**
Amazon Cooperation Treaty: Organização do Tratado de Cooperação Amazônica (OTCA/ACTO). Member states are: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela.

GTZ Project term: 2003-2012
Funding volume € 20.14 million

KfW Project term: In preparation
Funding volume € 10.00 million

CIM On Integrated Expert for development of sustainable tourism (2009-2011)

■■■ **Tropical Forest Conservation and Watershed Management in the Trifinio Area (El Salvador, Guatemala und Honduras)**
Comisíon Trinacional del Plan Trifinio

GTZ Project term: 2009-2011
Funding volume € 4.00 million

KfW Project term: 2011-2015 (in prep.)
Funding volume: € 12.0 million

■■ **Reducing Emissions from Deforestation and Forest Degradation (REDD) in Central America and the Dominican Republic**
Comision Centroamericana de Ambiente y Desarrollo

GTZ Project term: 2009-2013
Funding volume € 6.00 million

■■ **Conservation of Coastal Ecosystems in Central America**
Fondo SAM

KfW Project term: 2011-2015 (in preparation)
Funding volume € 5.00 million

■■■ **Resource Conservation on Indigenous Territories in Central America**
Various Executing Agencies

KfW Project term: In preparation
Funding volume € 6.00 million

■■■ **Strengthening the Rights of Indigenous Organisations in Latin America**
Fondo Indígena, Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (COICA) and others (builds on the results of the completed project "Institution Building of Indigenous Organisations in Latin America (COICA)"

GTZ Project term: 2006-2010
Funding volume € 4.75 million

■■■ **Support of the Activities by Organization of American States (OAS) to promote the Rights of Indigenous Peoples in Latin America**

GTZ Project term: 2008-2013
Funding volume € 1.00 million

■■■ **Caribbean Biodiversity Fund**
Various Executing Agencies

KfW Project term: 2011-2013 (in preparation)
Funding volume € 10.00 million

■■■ **Developing and Strengthening Competences and Capacities for Natural Resource Management in Central America**
CATIE, EAP-Zamorano, ESNACIFOR, ICAP and INCAE

InWEnt Project term: 2009 - 2013
Funding volume € 2.20 million

■■■ **Natural Resource Conservation "Selva Maya"**
Comisión Centroamericana de Ambiente y Desarrollo (CCAD)

InWEnt Project term: In preparation
Funding volume € 8.00 million

■■■ **Promotion of Governance and Management Competences to Implement REDD as an Effective Concept for Sustainable Protection and Management of Forests in Latin America**
Various Executing Agencies

InWEnt Project term: 2010 - 2014
Funding volume € 2.70 million

■■■ **Protected Areas and Climate Change**
Unión Internacional para la Conversación de la Naturaleza (UICN/IUCN)

CIM
- One Integrated Expert for protected areas and climate change (2010-2012)

One Integrated Expert for forestry (2008-2011)

Argentina

■■■ **Integrated Expert**

CIM Secretaría de Ambiente: One Integrated Expert for combating desertification and conserving biodiversity (2008-2010)

Bolivia

■■■ **Management of Nature Conservation Areas and their Buffer Zones / Biodiversity and Protected Areas (SNAP) - MAPZA / BIAP**

Ministry for Sustainable Development - Ministerio de Desarrollo Sostenible (MDS), Servicio Nacional de Áreas Protegidas (SERNAP)/MDSMA / El Fondo Nacional para el Medio Ambiente - FONAMA

GTZ	Project term:	1999-2010	**KfW**	Project term:	2002-2011
	Funding volume	€ 9.34 million		Funding volume	€ 10.14 million

■■ **Avoided Deforestation and Sustainable Forest Management**

Ministerio de Ambiente y Agua/ Autoridad de Bosques y Tierras (ABT)

GTZ	Project term:	2011-2014 (in prep.)	**KfW**	Project term:	2011-2015 (in prep.)
	Funding volume	€ 2.00 million		Funding volume	€ 8.00 million

■■ **Human Resource Cooperation**

CIM
- Fundación Amigos de la Naturaleza: One Integrated Expert on REDD to the Nature Park Noël Kempff (2009-2011);
- Instituto de Ecología (UMSA): One Integrated Expert for adaptation to climate change and biodiversity (2009-2011).

DED Ten experts with various communal and non-governmental organisations in the field of sustainable land use practices:
- Integrated Water Resource Management in Forest Areas (one expert);
- Sustainable coffee production in the lowlands of La Paz (three experts);
- Agroforestry in Alto Beni (La Paz area) (three experts);
- Agriculture and Agroforestry in the Rurrenabaque und San Buenaventura Municipalities (one expert);
- Forestry in the Provincia Velasco (two experts).

Brazil

■■■ **Amazon Region Protected Areas - ARPA**

Ministério do Meio Ambiente (MMA), Fundo Brasileiro para Biodiversidade (FUNBIO)

GTZ	See under completed projects		**KfW**	Project term:	2005-2010
				Funding volume	€ 17.67 million

■■■ **Demonstration Projects (PDA and PDPI)**

This project is an integral part of PPG7, the Pilot Programme for the Conservation of Brazil's Tropical Rain Forests. For the TC component, see under completed projects. Executing organisation: Ministério do Meio Ambiente (MMA).

KfW	Phase I:	Project term:	1995-2005	Funding volume:	€ 17.90 million
	Phase II:	Project term:	2003-2011	Funding volume	€ 10.20 million
	Indian Territories:	Project term:	1998-2010	Funding volume	€ 15.34 million

■■■ **Natural Resources Policy Programme (NRPP): Strengthening of an Integrated Environmental Management System in Acre, Amazonas, Pará and Rondônia**

Ministério do Meio Ambiente (MMA), State governments of Pará, Amazonas, Acre and Rondônia

GTZ	See under completed projects		**KfW**	Project term:	1996-2011
				Funding volume	€ 20.45 million

■■■ **Establishment of Ecological Corridors in Amazonia and Mata Atlântica**

Ministério do Meio Ambiente (MMA)

GTZ	See under completed projects		**KfW**	Project term:	2006-2012
				Funding volume	€ 16.36 million

■■■ **Protection of Mata Atlântica in Santa Catarina**

Fundação do Meio Ambiente (FATMA)

KfW	Project term:	2002-2010			
	Funding volume	€ 6.14 million			

■■■ **Protection of Mata Atlântica in Minas Gerais**
Secretaria de Estado de Meio Ambiente e Desenvolvimento Sustentável (SEMAD) and Instituto Estadual de Florestas (IEF/MG)

KfW	Phase I:	Project term:	2002-2007	Funding volume:	€ 7.67 million
	Phase II:	Project term:	2009-2012	Funding volume	€ 8.00 million

■■■ **Protection of Mata Atlântica in Rio de Janeiro**
Secretaria Estadual do Ambiente (SEA) and Instituto Estadual de Florestas (IEF/RJ)

KfW	Project term:	2002-2009
	Funding volume	€ 7.67 million

■■■ **Mata Atlântica Demonstration Project (PDA)**
Ministério do Meio Ambiente (MMA)

KfW	Project term:	2004-2010
	Funding volume	€ 17.67 million

■■■ **Promotion of Protected Areas and Sustainable Management**
Ministério do Meio Ambiente (MMA) with Instituto Brasileiro do Meio Ambiente e Recursos Naturais Renováveis (IBAMA)

GTZ	Project term:	2007-2010
	Funding volume	€ 12.50 million

■■■ **Protected Areas Fund (Endowment Fund) – FAP**
Ministério do Meio Ambiente (MMA), Fundo Brasileiro para Biodiversidade (FUNBIO)

KfW	Project term:	2009-2011
	Funding volume	€ 10.00 million

■■ **Sustainable Forest Management in the Amazon**
Brazilian Forest Service (SFB) and Brazilian Agency for Nature Conservation (ICMBio)

GTZ	Project term:	2011-2014 (in preparation)
	Funding volume	€ 15.00 million

■■■ **Amazon Fund**
National Development Bank

GTZ	Project term:	2011-2014 (in preparation)
	Funding volume	€ 18.00 million

■■■ **Forest conservation in the State of Amazonas**
State Government of Amazonas

GTZ	Project term:	2010-2013
	Funding volume	€ 10.50 million

■■■ **Demarcation and Protection of Indigenous Areas (Indian Territories)**
Fundação Nacional do Índio (FUNAI)

GTZ	Project term:	2007-2010
	Funding volume	€ 3.50 million

■■■ **Regional planning and development in Amazonia**
Ministério do Meio Ambiente (MMA)

GTZ	Project term:	2008-2010
	Funding volume	€ 2.73 million

■■ **Human Resource Cooperation**

CIM
- Center for International Forestry Research (CIFOR), Regional Office Latin America: One Integrated Expert to support the programme "Forests and Livelihoods" and REDD (2010-2012)

DED Sustainable Management of Natural Resources, Various executing organisations:

- Organic Production and Marketing at Lago Grande (Centro de apoio a projetos de ação comu-nitária – CEAPAC): one expert;
- Amazonas Programme: Coordination of rural development and resource conservation: one expert;
- Community-based Forestry (Brazilian Forestry Service): three experts;
- Sustainable Management of the Tapajós State Forest: one expert;
- Income generation and support to the manufacturing of value-added products in Rio Jari / Calha Norte - PA (Fundação Orsa): one expert.

Chile

■■■ **Human Resource Cooperation**
Corporacion Nacional Forestal

CIM One expert for conservation and sustainable use of forests [Returning Experts Programme]

Colombia

■■■ **Forestry as Production Alternative for the Coffee Board Area**
Federación Nacional de Cafeteros de Colombia (FNC)

KfW Project term: 2007-2014
Funding volume € 13.90 million (+ € 3.5 million for biodiversity component)

■■■ **Human Resource Cooperation: Integrated Experts**

CIM

- Biodiversity International, Regional Office of the Americas: one expert for traditional crops (2008-2012);
- Corporación Autónoma Regional de la Frontera Nor-Oriental (CORPONOR): one expert for Geographic Information Systems (2010-2012) and one for protected area management (2009-2011).

Costa Rica

■■ **Forestry Project Huetan Norte**
Fondo Nacional de Financiamento Forestal (FONAFIFO)

KfW Project term: 2003-2011
Funding volume € 10.23 million

Dominican Republic

■■■ **Programme "Conservation and Management of Natural Resources in Watersheds"**
(Environment-oriented development programme)
Technical Commission of the Office of the President "Secretariado Técnico de la Presidencia (STP)"

GTZ Project term: 2003-2012
Funding volume € 12.94 million

KfW See under completed projects

■■■ **Natural Resources Management (Region Artibonito & Jaragua Biosphere)**
Secretaría de Estado de Medio Ambiente y Recursos Naturales (SEMARN)

KfW Project term: 2007-2012
Funding volume € 5.50 million

Ecuador

■■■ Sustainable Natural Resources Management Programme (GESOREN)

Instituto Nacional Ecuatoriano de Cooperación Internacional (INECI) / Instituto Ecuatoriano Forestal y de Áreas Naturales y Vida Silvestre; FC: Specifically for Gran Sumaco Biosphere.

GTZ Project term: 2005-2013
Funding volume € 26.28 million

KfW Phase I 1998-2007 € 2.56 million
Phase II 2004-2010 € 5.11 million

DED See under Human Resources Cooperation

■■■ Human Resources Cooperation

DED Conservation and Sustainable Management of Natural Resources

- Implementation of the Management Plan for Sumaco Biosphere Reserve (Ministry of Environment);
- Protected area management in the Amazon region (IUCN): 2 experts;
- Management of the Indigenous Territories Awá and Chaci: 1 expert;
- Conservation and Sustainable Management Natural Resources in Zamora Chinchipe: 1 expert.

CIM

- Charles Darwin Foundation: One Integrated Expert for environmental education (2007-2011);
- Facultad Latinoamericana de Ciencias Sociales (FLACSO): One Integrated Expert for intercultural aspacts of environmental management (2008-2012).

■■■ Protected Areas Programme

Ministry of Environment

KfW Project term: 2010-2016
Funding volume € 20.50 million

■■■ Forest Conservation Chongon-Colonche

Ministry of Environment / Fundación Natura

KfW Project term: 1998-2010
Funding volume € 7.67 million

■■■ Tropical Forest Conservation Morona-Pastaza

Ministry of Environment / Nacionalidad de los Achuar en Ecuador (NAE)

KfW Project term: 2004-2011
Funding volume € 3.58 million

■■ Forest Conservation and REDD – Sociobosque

Ministry of Environment

KfW Project term: 2010-2015
Funding volume € 10.00 million

■■■ Galapagos Invasive Species Fund (FEIG)

Ministry of Environment / UNDP

KfW Project term: In preparation
Funding volume € 2.50 million

■■■ Debt for Nature Swaps

FAN (National Environmental Fund) and Ministry of Environment

KfW ***Protected Areas System***
Swap V: € 3,240,000 (endowment fund)
Swap VII: € 3,160,000 (endowment fund)
Swap VIII € 760,000 (endowment fund)
Forest Protection Gran Sumaco
Swap VI. € 3,203,000 (endowment fund)

Guyana

■■■ Tropical Forest Protection

Environmental Protection Agency (EPA)

KfW **Phase I** Project term: 2006-2010 Funding volume € 2.93 million
Phase II Project term: 2010-2012 Funding volume € 5.00 million

Haiti

■■■ **Management of Natural Resources**

DED
- Transboundary management of natural resources (Fundación de Desarrollo de Azua, San Juan y Elias Piña, Dominican Republic) and Caritas/Hinche, Haiti): one expert;
- Introduction of innovative agricultural approaches for the management of Parc de la Visite (Fondation Seguin): one expert.

Honduras

■■ **Municipal Rural Development and Conservation Rio Plátano**

Ministry of Presidency (Secretaría de la Presidencia)

KfW Project term: 2010-2014
Funding volume € 6.70 million

■■■ **Human Resource Cooperation**

CIM Universidad Zamorano - Escuela Agrícola Panamericana/ Centro Zamorano de Biodiversidad: One Integrated Expert (entomologist) (2008-2012);

DED Asociación Patuca (network of NGOs) Protection and Sustainable Use of the Patúca National Park One expert for the establishment of management plans

■■■ **Implementation of article 8j (Traditional Knowledge, Innovations and Practices)**

A measure funded by the project "Implementing the Biodiversity Convention"

GTZ Project term: 2007-2010
Funding volume € 0.14 million

Mexico

■■■ **Integrated Experts with Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)**

CIM
- Biodiversity Information Systems (one expert 2006-2010);
- Geographic Information Systems and Remote Sensing (one expert 2005-2011);
- Coordination of international biodiversity projects (one expert 2009-2011);
- Analyasis of invasive species (one expert 2009-2011);
- Analysis of biodiversity-related remote sensing data (one expert 2007-2011).

Nicaragua

■■■ **Sustainable Management of Natural Resources and Strengthening of Entrepreneurial Capacities**

Secretaría de Relaciones Externas y Cooperación (SREC) of the Ministry for Foreign Affairs (MINREX). In cooperation with DED (see below)

GTZ Project term: 2005-2011
Funding volume € 13.17 million

■■■ **Conservation and Sustainable Use of Natural Resources**

DED
- Agroforestry in the area of Siuna-Bonanza-Rosita (Instituto Forestal - INAFOR):two experts;
- Conservation and Sustainable Use of the Tropical Dry Forest in the Pacific Region (local departments of the Ministry of Environment, Fauna and Flora International, local NGOs): four experts.

Paraguay

■■■ **Conservation and Sustainable Management of Natural Resources**
(National Strategy for Resource Conservation)
Secretaría de Medio Ambiente (SEAM)

GTZ Project term: 1993-2010
Funding volume € 8.44 million

Peru

■■■ **Support to Conservation Areas**
PROFONANPE (Peruvian Trust Fund for National Parks and Protected Areas) and SERNANP (Servicio Nacional de Áreas Naturales Protegidas / National Service of Natural Protected Areas)

KfW	Phase I	1998-2006	€ 5.11 million
	Phase II	2004-2010	€ 7.00 million

■■■ **Nature Resources Management Morona-Pastaza**
Binational Plan for Peace and Development Perú-Ecuador (debt-for-nature swap)

KfW Project term: 2003-2012
Funding volume € 7.55 million

■■■ **Bi-National Tropical Forest Conservation Programme**
PROFONANPE (Peruvian Trust Fund for National Parks and Protected Areas) and SERNANP (Servicio Nacional de Áreas Naturales Protegidas / National Service of Natural Protected Areas)

KfW Project term: 2007-2011
Funding volume € 2.50 million

■■ **Programme for Sustainable Rural Development in Peru**
Agencia Peruana de Cooperación Internacional (APCI), Ministerio del Ambiente (MINAM), Ministerio de Agricultura (MINAG), Ministerio de Economía y Finanzas (MEF), Servicio Nacional de Áreas Naturales Protegidas por el Estado (SERNANP), Regional Governments of Piura, Cajamarca and San Martín

GTZ Project term: 2003-2013
Funding volume € 33.07 million

■■ **Alternative Development Tocache Uchiza**
DEVIDA (Comisión Nacional de Desarrollo y Vida Sin Drogas – National Drugs Agency)

KfW Project term: 2003-2012
Funding volume € 12.27 million

■■ **Agro-environmental Program Ceja de Selva**
San Martín Regional Government (GORESAM)

KfW	Project term:	2007-2012	Funding volume:	€ 7.10 million
	Project term:	In preparation	Funding volume:	€ 8.30 million

■■ **Human Resources Cooperation**

CIM
- Proyecto Especial Alto Mayo Gobierno Regional San Martin: One Integrated Expert for payment for ecosystem services (2009-2011)

DED ***Sustainable Land Use and Forest Management***
- Promoting cacao plantations in agroforestry systems in Oxapampa and Amazonas provinces (Aprocam, Pronaturaleza): two experts;
- Agroforestry in the Región Ucayali (Consorcio para el Desarrollo Sostenible de Ucayali – CODESCU): one expert;
- Sustainable Forest Management in the region of Jaén/San Ignacio (regional administration of Junín, Caritas): two experts;
- Promotion of value-added forest products in indigenous communities in the regions of San Martín/Alto Mayo, Ucayali/Pucallpa, Oxapampa/Puerto Bermudez, and Satipo

(various executing organisations): five experts;
- Promotion of self-governance of indigenous peoples and communities in the region of Ucayali (Organización Regional Ucayali – ORAU): one expert;
- Participative management of the Alto Mayo Protected Forest in the San Martín Region: one expert.

Supraregional Projects

■■■ **Implementing the Biodiversity Convention**
Sectoral project

Project term: 1993-2012
Funding volume € 24.06 million

■■ **Sustainable Management of Resources in Agriculture**
(with a component on agrobiodiversity)
Sectoral project

GTZ Project term: 2009-2013
Funding volume € 4.33 million (for the programme as a whole)

■■ **Implementation of the International Forest Treaty**
Funds-in-trust project

FAO Project term: 2008-2010
Funding volume € 0.25 million

■■ **Tourism and Sustainable Development**
Sectoral project

GTZ Project term: 2007-2010
Funding volume € 1.04 million

■■■ **Catalyzing Action and Enhancing Synergies in the Implementation of Biodiversity Obligations**
Focus on interface between biodiversity and climate change nationally and on adaptation internationally
Funds-in-trust project

IUCN Project term: 2010-2011
Funding volume € 0.50 million

■ **Support to International Agricultural Research**
Various International Research Centres

GTZ Project term: Yearly renewal
Funding volume Approx. € 169 million between 1994 and 2010 (of which a relatively small percentage is dedicated to biodiversity)

■■ **Support to International Forest-related Processes (IWRP)**
(previously: Support to International Programmes Relevant to Tropical Forests)
Sectoral project

GTZ Project term: 1988-2010
Funding volume € 21.79 million

■■■ **German Contribution to the Equator Initiative**
The United Nations Development Programme (UNDP) is the implementing and executing agency.

UNDP Project term: 2005–2008; Funding volume: € 0.30 million.
Project term: 2009–2010; Funding volume: € 0.20 million.

■■■ **Support to the Publication of the "Earth Negotiations Bulletin"**
International Institute for Sustainable Development (IISD): Implementing and executing agency

Project term:	2002-2008	Funding volume:	€ 0.44 million
Project term:	2010-2011	Funding volume:	€ 0.06 million

■■ **Programme on the Promotion of Social and Ecological Standards in Developing Countries**
(with a component on Forest Certification)
GTZ Project term: 2001-2013
Funding volume € 17.34 million (for the programme as a whole)

International Climate Initiative

Projects promoted by the International Climate Initiative (ICI), an initiative initiated by the Federal Ministry for the Environment, Nature Protection and Nuclear Safety. The funding level is given in million Euro; IA = Implementing Agency;

Country	Project Title	Funding Period	Funding	IA
Global	Supporting Structures for the LifeWeb Initiative	2008-2011	1.284	SCBD
Armenia, Azerbaijan, Georgia	Mitigating Impacts of Climate Change through Forest Restoration	2008-2010	4.825	KfW
Belarus, Ukraine	Restoring Peatlands	2008-2011	3.546	KfW
Brazil	Conserving the Atlantic Coastal Forests (Mata Atlântica)	2009-2012	14.500	GTZ
		2008-2012	10.500	KfW
	Support for Protected Areas in Amazonia (ARPA)	2008-2010	1.119	GTZ
		2008-2009	4.300	KfW
Cameroon, Rep. of Congo, Central African Republic	Trinational Forest Conservation Area in the Congo Basin	2008-2010	1.452	KfW
Chile	Establishing the Patagonia National Park to Protect Climate, Landscape and Biodiversity	2009-2011	13.200	GTZ
China	Cooperation Platform for the Conservation of Species-Rich and Carbon-Storing Ecosystems	2008-2011	1.049	GTZ
Congo (DR)	Assessment and Development of a Modernised, Expanded Network of Protected Areas	2009-2012	2.270	WWF Germany
	Conservation of the Lac Tumba Lediima Reserve & Ngiri Triangle	2008-2011	1.096	KfW
	Integrated Protection Area for the Ngiri Lowland Rainforest	2010-2012	1.500	KfW
Ethiopia	Climate Protection and Preservation of Primary Forests – A Management Model using the Wild Coffee Forests in Ethiopia as an Example	2009-2013	3.378	NABU
Fiji, Vanuatu, Solomon Islands, Samoa and Tonga	Pacific Mangroves Initiative for Climate Change Adaptation and Mitigation	2009-2013	2.689	IUCN
Georgia	Climate-Tolerant Restoration of Degraded Bioregions in Southern Caucasus	2008-2011	1.250	GTZ
Guyana, Suriname, Venezuela, Brazil	Guyana Shield Initiative/ Avoided Deforestation through Consolidation and Creation of Protected Areas in the Guianan Region	2009-2011	3.803	KfW
Indonesia	Securing Natural Carbon Sinks and Habitats in the Heart of Borneo	2009-2012	1.005	KfW
	Harapan Rainforest – Pilot Restoration of a Degraded Forest Ecosystem on Sumatra	2009-2013	14.595	KfW
	Biodiversity Conservation through Preparatory Measures for Avoided Deforestation (REDD) in the Merang Peat Forest Area	2008-2012	1.445	GTZ
	Expanding Information and Knowledge Management for Biodiversity Conservation through Preparatory Measures for Avoided Deforestation (REDD) in the Merang Peat Forest	2009-2011	0.625	GTZ

Country	Project Title	Funding Period	Funding	IA
Indonesia	Adaptive and Carbon-financed Forest Management in Tropical Rainforest Heritage of Sumatra	2009-2011	0.635	UNESCO World Heritage Centre
Indonesia, Malaysia, PN Guinea, Philippines	Marine and Coastal Protected Areas in the Coral Triangle Initiative	2008-2010	2.400	The Nature Conservancy
Kazakhstan	Maintaining Habitats inthe Altai-Sayan Region	2008-2009	1.870	UNDP
Marshall Islands, Micronesia, Palau	Advancing the Micronesia Challenge through Enlarging the Protected Area System	2008-2010	2.226	The Nature Conservancy
Mexico	Climate Change Mitigation in Five Representative Ecosystems	2008-2010	2.545	GTZ
Papua New Guinea	Establishing the YUS Indigenous Forest Reserve	2008-2011	7.280	KfW
Peru	Reducing Emissions from Deforestation by Conserving Forest Ecosystems in Protected Areas	2008-2011	2.280	KfW
	Climate Protection Aspects of Preserving Biodiversity in Peruvian Tropical Forest	2009-2012	3.600	GTZ
	Avoiding Emissions through Effective Management of PAs in Peruvian Amazonia	2009-2012	4.123	KfW
Philippines	Climate-Related Modernisation of National Forest Policy and Piloting REDD Measures	2009-2012	3.200	GTZ
Philippines	Adapting to Climate Change and Conserving Biological Diversity	2009-2011	2.945	GTZ
Russian Federation	Mitigating Impacts of Climate Change through Conserving Virgin Forests in the Bikin Region	2008-2011	2.512	KfW
	Conservation of Habitats in the Altai Sayan Region through Expansion of the Protected Area Network	2009-2011	2.999	UNDP-GEF
	Improved Protected Area System in Komi Republic for Better Conservation of Globally Important Biodiversity and Maintenance of Carbon Pools	2009-2011	2.993	UNDP-GEF
Rwanda	Preserving Biodiversity in the Nyungwe Forest with an Agroforestry Belt	2009-2012	1.614	Univ. Koblenz-Landau
South Africa	Conserving Wetlands in the Cape Floristic Region 1	2008-2009	2.000	UNDP
Tajikistan	Regeneration and Sustainable Management of Alluvial Forests in Gorno-Badakhshan	2009-2011	1.040	GTZ
Tanzania	Conserving Mountain Forests	2008-2010	2.171	UNDP-GEF
Thailand	Climate Protection in Nature-Based Tourism	2008-2011	1.174	GTZ
Turkey	Adaptation to Climate Change and Conservation of Biodiversity through Protection and Sustainable Use of Wetlands	2009-2011	0.990	GTZ
Turkmenistan	Sustainable Forest Management	2008-2011	1.630	GTZ
Ukraine	Avoiding Greenhouse Gas Emissions through the Restoration and Sustainable Management of Peatlands in the Ukraine	2009-2012	5.126	KfW
Viet Nam	Sustainable Development of Coastal Protected Forests and Wetlands in Bac Lieu Province	2008-2011	1.600	GTZ
Zambia	Sustainability of the Miombo Ecoregion through the Enlargement and Improved Management of Protected Areas	2008-2010	2.775	UNDP-GEF