



KfW Development Bank

»»» Materials on Development Finance

Preserving natural riches, securing our livelihoods.

Issue 4, 16 October 2024

Biodiversity at KfW Development Bank

Authors: Alina Adam, Lydia von Krosigk, Sandra Gmelin, Roland Melisch, Timo Schönfeld, Kai Wiegler, Elena Shekunova

Editor: Friederike Bauer / Susanne Brösamle

Introduction and summary

Dozens of species die out every day. Scientists are therefore already talking about mass extinction, more precisely the Earth's sixth mass extinction. The last one happened 66 million years ago, when the dinosaurs disappeared. However, the previous extinction waves had natural causes; they were due to asteroid impacts or ice ages. This time, humans are the driving force, especially by using more and more land for their purposes. In fact, humans are changing nature in an unprecedented way. Since 2020, more than half of all materials on Earth have been made from man-made materials such as concrete, asphalt, metal, plastic, glass or paper instead of natural biomass. This is a shift of great scope.

As a result, important ecosystems all over the world and thus vital services provided by nature are lost to humans. If we imagine the entire history of Earth as one 24-hour day, humanity has only been living on this planet for two minutes. In this short time, however, it has already overexploited three quarters of the globe. In order to preserve the basis for humanity's existence, we need to protect the remaining safe havens for nature and change our behaviour.

If the rate of loss continues to progress this way, it will also be impossible to achieve 80% of the Sustainable Development Goals because everything depends on nature: nutrition, water, medicinal herbs, raw materials. Nature is not only beautiful to look at and a place of rest, it also provides a variety of benefits that humans cannot live without. Last but not least, it is a basic material for the economy. According to the World Economic Forum, more than half of global economic output is at risk from declining nature.

Preserving biodiversity has been important to KfW Development Bank for a long time now. It has more than twenty years of experience in this field and currently supports well over 850 nature conservation areas and other effectively managed areas for the conservation of nature¹ in around 70 countries and regions. This covers a total area of 2.1 million km² and is equal to approximately six times the area of Germany or Mexico. KfW's activities focus on Latin America and Africa. In addition to the goal of increasing the protected area – the international community has decided on 30% protection by 2030 – KfW is keen to manage these areas more effectively and fairly and to take into account the social and economic well-being of local residents. This is also why its projects adhere to strict international social and ecological standards.

KfW is among the trailblazers when it comes to developing innovative financial instruments for sustainable conservation. On behalf of the German Federal Government, KfW has created several exemplary conservation trust funds that have taken conservation to a new level both conceptually and financially; examples include the Caucasus Nature Fund for conservation in the Caucasus, and the Blue Action Fund to promote marine conservation worldwide. The Legacy Landscapes Fund (LLF), which KfW established at the end of 2020 on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), also falls into this category. By 2030, it should have helped to ensure that the most important conservation areas in partner countries have robust financing, thereby preserving them.

Overall, KfW's goal in the sense of the International Convention on Biodiversity is to reverse the trend of declining biodiversity. Conservation areas play a key role in this, although they are not the only tool. The restoration of degraded land, sustainable agriculture, fisheries and forest use and the inclusion of biodiversity-protecting measures in projects in other sectors (mainstreaming) are also important elements in order to stop and reverse the unprecedented and dangerous loss of biodiversity.

Alarming

Up to a million species are at risk of extinction and, for many, this will occur in the next few decades. Today, the rate at which species are dying out is between ten and one hundred times higher than the average rate over the last ten million years.

¹ OECMs (other effective area-based conservation measures) designate areas that achieve effective in-situ conservation of biodiversity outside protected areas (IUCN).

Table of contents

Introduction and summary	2
1. Introduction	4
2. Biodiversity at KfW	6
Aim of promotion	8
International standards	8
3. Biodiversity by subject area	9
3.1 Conservation areas	9
3.2 Forest conservation and management	13
Restoring forest landscapes	16
Deforestation-free supply chains	16
Compensation for preventing deforestation	18
3.3 Coastal and marine protection	18
4. Outlook and trends	22
Trend 1: “Implementing Montreal”	22
KfW Development Bank’s contribution	22
Trend 2: Dual crisis of biodiversity and climate	23
KfW Development Bank’s contribution	24
Trend 3: Biodiversity protection and agriculture	24
KfW Development Bank’s contribution	24
Trend 4: Biodiversity protection despite crises	25
KfW Development Bank’s contribution	25
Trend 5: Mobilising the private sector	25
KfW Development Bank’s contribution	26
Conclusion	26

1. Introduction

Whether food, water, building materials or medicinal plants – nature in all its diversity forms the decisive basis for human life. Forests are home to a large proportion of terrestrial animal and plant species and provide habitats and livelihoods for almost two billion people. The seas give us food, regulate the climate and produce half of the oxygen we breathe. Intact ecosystems also increase resilience in the face of natural disasters and climate change. And they form the basis for our global business and activities. In short: the protection and sustainable use of biodiversity ensures our survival.

And yet, this diversity is under threat from forests being destroyed, animals being poached, soils being overcultivated, oceans being polluted and overfished, natural resources being depleted, and an increasing number of areas being sealed. In addition to changes in land use and the overuse of natural resources, climate change is the third largest cause of species loss. The preservation of biodiversity has long been a major concern at KfW Development Bank and it will play an even greater role going forward in light of the current threats. KfW's global commitment in this area is based on the German Federal Government's specifications and international treaties.

The Convention on Biological Diversity (CBD) provides the binding legal framework. Almost every country in the world has now ratified this convention. Its main objectives are to ensure the protection and sustainable use of biodiversity and natural resources as well as the fair distribution of the resulting economic gains. Equal opportunities also play an important role in the convention.

Based on the CBD, the 196 contracting states adopted the Kunming-Montreal Global Biodiversity Framework (GBF) at the UN Biodiversity Conference in 2022. This framework agreement is regarded as a milestone for the protection of biodiversity in international policy and as a counterpart to the 2015 Paris Agreement on climate change. It forms the superstructure, the umbrella for all other strategies and actions relating to biodiversity. The vision laid down in the GBF is: By the middle of the century, humanity is expected to live "in harmony with nature" again. In the meantime, the plan is to decrease the rate of man-made extinction to one tenth and to make the management of biodiversity sustainable.

This vision is underpinned by 23 targets to be achieved by 2030. One of these is the very prominent requirement to protect 30% of the Earth's surface on land and in the sea (known as the 30x30 target). This is a new approach and means that the protected areas on land must almost double (from currently around 17%) and nearly quadruple in the oceans (from currently close to 8%).

This also includes the target of restoring 30% of degraded land by 2030. The rate at which invasive species are spreading should also be reduced by half, as should the risk associated with the use of pesticides and highly hazardous chemicals. The objective is also to reduce subsidies that are harmful to nature. Indigenous Peoples and Local Communities (IP&LCs) were officially recognised in Montreal as important protectors of biodiversity because they often have specialised knowledge of their natural environment and treat it with care. They are mentioned in various ways and prominently in the document and are repeatedly highlighted as important actors in biodiversity protection. Accordingly, they should be much more involved and their knowledge in higher demand in the future.

In addition, from 2025, USD 20 billion is to go to international biodiversity protection and from 2030, USD 30 billion is to go to a new fund under the Global Environment Facility. Currently, this financing for the poorer countries is around USD 10 billion per year (calculations by the Organisation for Economic Cooperation and Development – OECD). It must double or triple by 2030. The Montreal targets are therefore ambitious in every respect and can only be achieved with international cooperation.

The most important factors

The main drivers of biodiversity loss are changes in land use, general overexploitation, climate change, environmental pollution and the spread of invasive species.

Indigenous communities

Are officially recognised as important guardians of biodiversity because they usually have specialised knowledge of nature.

The Montreal target catalogue follows the “Aichi targets” from 2010. Back then, the community of nations had already decided to stop the loss of biodiversity. However, none of these targets were achieved by 2020. So it’s not enough to adopt and set goals; it comes down to implementation. Otherwise, other global goals will also be at risk. The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) makes clear that it will not be possible to achieve 80% of global Sustainable Development Goals (SDGs) and key aspects of the Paris Agreement without effective measures to preserve biodiversity. As a result, it assesses that dramatic loss of biodiversity is just as significant as climate change.

In fact, it is a dual crisis where both phenomena have the potential to amplify each other. When nature is lost, forests are deforested and marshes are dried out, natural carbon sinks also disappear – a process that further fuels climate change. Conversely, preserving nature is a good way to slow down global warming. The American government’s Special Presidential Envoy for Climate, John Kerry, even says: “Nature is our best line of defence against the climate crisis.” Scientists consider the biodiversity crisis even more serious for humans than higher temperatures on Earth. Climate change determines HOW we live, how we (have to) cope with higher temperatures, whereas biodiversity loss determines WHETHER we survive.

KfW supports the German Federal Government in implementing the objectives of the Kunming-Montreal Global Biodiversity Framework. German Chancellor Scholz announced shortly before the summit that he would increase the funds for financing global biodiversity to EUR 1.5 billion annually from 2025. This had roughly been equivalent to doubling the funds paid back then. In 2023, Germany made around EUR 1 billion available for biodiversity via the Federal Ministry for Economic Cooperation and Development (BMZ). Of these funds, KfW implements more than 60% on behalf of the BMZ. However, as important as additional funds are, it is not only about money, but also about innovative approaches that create a balance between people and nature and involve the private sector much more than before in biodiversity protection.

KfW is working at all levels to preserve humanity’s natural foundations and to develop both new financial products and more inclusive approaches to nature conservation. As part of what is known as the “biodiversity roadmap” process, KfW is currently working to draft a biodiversity strategy for the entire group. It is intended to provide clear guidelines for both promotional activities and KfW’s own activities. Preserving biodiversity is one of mankind’s great challenges. Meeting this challenge will require many activities from many actors. KfW wants to contribute to this as much as it can.

Crucial for the SDGs

Without effective nature conservation measures, other sustainability goals are also at risk. In that case, around 80% of the SDGs and key aspects of the Paris Agreement on climate change cannot be achieved.

2. Biodiversity at KfW

Through the work of KfW, Germany has become one of the world's biggest bilateral donors for biodiversity conservation. KfW currently promotes 350 projects in around 70 countries and cross-border regions which have the primary or secondary goal of protecting biodiversity. The total volume increased from EUR 3.7 billion to around EUR 4 billion² between 2022 and 2023, with projects that pursue biodiversity conservation as a secondary objective (BTR 1) constituting 20% of the project volume. Close to a third of the funds go to Latin America, followed by Africa, which receives around 30% of the funds.

Comparison

Germany is one of the world's most important donors in the field of biodiversity conservation.

Project portfolio being implemented in 2023 with biodiversity as the primary/secondary objective (in EUR million)

Budget and market funds¹

	BMZ	BMU	Mandates	Total
Africa	1,243	0	4	1,247
Asia	410	47	20	476
Europe/Caucasus	281	10	3	294
Latin America	1,284	63	187	1,535
North Africa / Middle East	4	0	0	4
Supraregional	405	0	30	435
Total	3,627	120	244	3,991

Source: Own data
¹ Numbers rounded

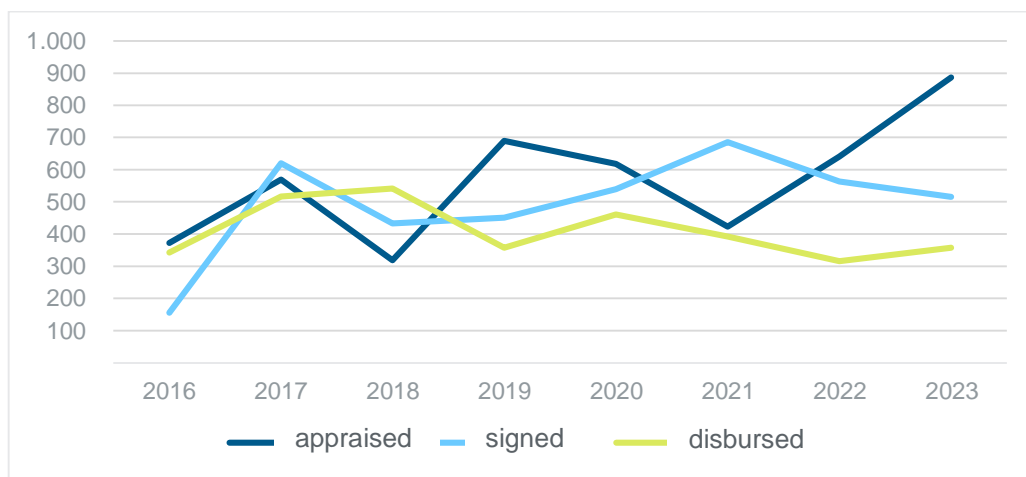
The portfolio continued to expand between 2018 and 2023. With 39 projects, the number of project appraisals in 2023 was close to the number in 2022 (41). In terms of financing volume, significantly more projects were assessed in 2023 at EUR 870 million than in 2022 (695 million). In 2023, the volume of 36 new financing agreements was EUR 515 million. In addition, the disbursement amount for projects that are entirely or partially relevant for biodiversity increased by 13% year-on-year to EUR 357 million. In view of the progressive loss of species, KfW's portfolio will remain relevant for the preservation of biodiversity. More than 90% of the projects are commissioned by the Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

Commissioned by the BMZ

KfW Development Bank's main clients in relation to biodiversity and natural resources are the Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

In addition to the pure federal budget funds (via grants or loans), KfW can also use market funds for promotional loans and interest rate reductions. These are funds that KfW raises on the market and passes onwards to partner countries as low-interest loans. In 2023, the share of market funds in the total portfolio was 17%. The instrument is particularly suitable for debt-capable emerging economies as well as productive and therefore profitable activities in biodiversity protection. Examples include sustainable forestry in Peru, Brazil, Mexico and biodiversity-friendly agriculture in India.

² Total of all ongoing projects with biodiversity impacts as at the reporting date 31 December 2023



Upwards trend

The overall trend points upwards. Because conservation projects are long term, shifts between years are possible.

Source: Own data

The marine conservation areas cover an area of nearly 340,000km², representing 40% of the total protected area receiving support. This share is largely due to the promotional activity of the Blue Action Fund. This fund is a non-profit foundation for coastal and marine protection set up by the Federal Ministry for Economic Cooperation and Development (BMZ) and KfW in 2016, which is now internationally well established and supports a marine conservation area as large as Germany.

Conservation areas supported by KfW, worldwide (2023)¹

Existing protected areas of ongoing projects for which geodata is available (WDPA or shape files).¹

Several hundred areas

KfW supports hundreds of nature conservation areas worldwide.

Total conservation areas		World	Africa	Asia	Europe	Latin America
	Quantity	850	298	147	72	333
	Area (in 1,000km ²)	2,120	942	407	30	741
Forest	Quantity	450	86	89	48	227
	Area (in 1,000km ²)	737	178	129	28	402
Steppes and savannahs	Quantity	238	170	31	19	18
	Area (in 1,000km ²)	973	711	224	1	36
Coastal and marine areas	Quantity	131	37	14		80
	Area (in 1,000km ²)	346	47	10		290
Mountains	Quantity	20	4	11		5
	Area (in 1,000km ²)	51	6	39		6
Inland waters / wetlands	Quantity	11	1	2	5	3
	Area (in 1,000km ²)	13	0.2	5	1	7

Source: Own data
¹ Numbers rounded

Aim of promotion

Working towards the goal of preserving as many natural and near-natural habitats as possible, KfW is active in the following areas:³

- 1. Terrestrial and marine conservation areas and systems** (around EUR 1.4 billion):
Identifying new and securing existing areas through better equipment, management and long-term financing
- 2. Forest conservation and management**
 - Sustainable forest management: 138 projects (EUR 1,910 million)
 - Forest Landscape Restoration (FLR): 88 projects (approx. EUR 1,132 million)
 - Reducing Emissions from Deforestation and Forest Degradation (REDD):
215 projects (approx. EUR 2,915 million)
 - Forest Law Enforcement, Governance and Trade (FLEGT):
8 projects (approx. EUR 222 million)
 - Deforestation-free supply chains: 40 projects (approx. EUR 778 million)
- 3. Coastal and marine conservation** (EUR 1,054 million)

International standards

The principles of environmental and social due diligence and sustainability are, in accordance with the bank's Sustainability Guideline,⁴ central themes for KfW Development Bank, including in the field of biodiversity. All measures undergo a structured environmental and social impact assessment (ESIA). The ESIA is intended to identify any foreseeable negative effects and risks that a project may have on the environment and on matters related to society and human rights. Identifying these factors enables suitable measures to be applied so the effects can be avoided, reduced to an acceptable minimum or balanced out.

The assessment criteria are the environmental and social standards of the World Bank Group, the core labour standards of the International Labour Organization (ILO) as well as supplementary requirements of the Federal Ministry for Economic Cooperation and Development (BMZ), including on human rights, the recommendations of the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT), the FAO Code of Conduct for Responsible Fisheries (CCRF) and the FAO Voluntary Guidelines for Securing Sustainable Small Scale Fisheries (VGSSF).

One of the interdisciplinary issues within the assessment process focuses in particular on avoiding risks to human rights during biodiversity projects, for example, in relation to IP&LCs. Having as small an impact as possible on local livelihoods and opening up alternative sources of income and social-economic development opportunities to people living in conservation areas are key elements of sustainable conservation projects.

Promotional policy

KfW's goal is to preserve natural habitats as fully as possible.

High standards

Conservation at KfW adheres to high social, ecological and human rights standards. These are based on the relevant international standards and agreements.

³ Projects often contribute to more than one aim; this may mean that some are counted multiple times. This is why the total amount cited here is higher than the total volume for the projects.

⁴ KfW Sustainability Guideline (2016): Assessment and Management of Environmental, Social, and Climate Aspects: Principles and Procedures.

3. Biodiversity by subject area

3.1 Conservation areas

Exceptional natural treasures need special protection. That is why it is important to many people that, for example, the coral reefs of the Caribbean, the gorilla population of the Congo Basin, and the tropical rainforests of Sumatra are kept intact. An important tool for preserving these precious natural resources is conservation zones, particularly national parks. Conservation areas are also crucial to protecting the climate and adapting to climate change. Intact ecosystems can store more carbon and are better able to cope with the effects of climate change.

Legacy Landscapes Fund: a fund for the protection of large natural landscapes

Nature is lost at a rapid pace. An area of forest equivalent to the size of a football pitch is destroyed every four seconds. This has not changed despite various international agreements – most recently at the 2022 United Nations Biodiversity Conference of the Parties in Montreal. In fact, the loss of biodiversity has even accelerated in recent years. Well-managed conservation areas are seen as one of the best ways to preserve biodiversity, if they get local people involved. IP&LCs have often been preserving their areas for centuries and can protect the basis for their existence with appropriate conservation concepts.

However, only 17% of land is currently under protection, significantly less than the 30% decided in Montreal. And the conservation areas that exist often do not work effectively enough to prevent biodiversity loss. The reason? Around 80% of all species are concentrated in about 20% of the world's surface, mostly in developing countries. There is often a lack of funds to manage conservation areas effectively and in accordance with the interests of the local population. This is why KfW, on behalf of the German Federal Government and in cooperation with other international players, set up the Legacy Landscapes Fund (LLF) in late 2020. The idea behind it is alluring. If we can successfully protect as many species and ecosystems as possible in high-biodiversity, low-income regions, this will preserve a significant proportion of the biodiversity that is key to survival for the whole of humanity. The fund is filling precisely this gap. It now provides long-term support for 14 protected areas with USD 1 million per year to secure their base stock.

The special feature of the fund is that it is supported not only by state actors such as Germany, France and Norway, but also by private companies and foundations. The Gordon and Betty Moore Foundation, the Rob & Melanie Walton Foundation, the Arcadia Foundation and The Wyss Foundation are already on board. Other private actors are interested. NGOs such as the Campaign for Nature, Frankfurt Zoological Society, Conservation International, African Parks and the International Union for Conservation of Nature (IUCN) are also working with the fund.

The LLF is an innovative, international financial instrument that aims to provide long-term and sustainable financing for nature conservation areas and neighbouring landscapes, and its strength lies in its diverse partnerships. It relies on cooperation between public and private donors, politicians and scientists, park administrations and local communities. This approach is underpinned by the idea that no single country, trust or company can overcome this challenge alone.

By 2030, the fund is aiming to accumulate trust capital totalling USD 1 billion and promote at least 30 areas in developing countries. Currently, around EUR 325 million has been committed. This will then cover 200–250,000 km² of land that is particularly rich in different species and that, taken as a whole, is at least as big as the United Kingdom.

Securing biodiversity

The Legacy Landscapes Fund follows a simple but captivating idea: secure the most biodiverse areas in developing countries with international funds in the long term.



Let nature have its space so that it can survive and recover. Photo: FZG / Daniel Rosengren

Conservation has long been a traditional part of German development cooperation. KfW has over 30 years of experience with projects in this field and understands how to intelligently combine conservation and sustainable economic growth. It is a global leader when it comes to developing and implementing innovative financing solutions for areas including conservation.

KfW is currently contributing to the financing of around 850 nature conservation areas and other effective area-based conservation measures (OECM) worldwide with a total area of around 2.1 million km² in around 70 countries on behalf of the German Federal Government. This roughly corresponds to an area the size of Mexico. Its promotional activities focus on Latin America and Africa. This focus includes 27 areas that have been declared as UNESCO World Heritage Sites. KfW is thus promoting almost every eighth world heritage site on behalf of the German Federal Government. KfW also supports 40 Ramsar sites with the aim of preserving wetlands.

World leader

KfW is a world leader in innovative financing solutions for conservation. It has more than 30 years of experience in this area.

Around a third of the protected areas are predominantly forests. In addition to its goal of expanding the natural areas under protection, KfW is also involved in ensuring that these regions are managed effectively and fairly. For instance, it invests in the administration structures and buildings in protected areas, as well as contributing to equipment, staff training and measures to promote sustainable use of resources by local communities.

Conservation zones that are efficiently managed with the involvement of local communities also help to reduce illegal wildlife trading worldwide. Elephants in Eastern and Central Africa and rhinos in Southern Africa are under particular threat. This is why KfW promotes the introduction of internationally recognised management standards and improved monitoring systems (such as the Advanced Management Effectiveness Tracking Tool (METT)) in conservation areas.

When financing conservation areas that experience specific threats from poaching, KfW concentrates primarily on the following aspects: better training and working conditions for rangers, comprehensive application of innovative technology for monitoring animal numbers, and involving local people in managing the areas.

Another focus area of promotional programmes is improving income and living conditions for the communities that neighbour conservation areas, for example through tourism, forest management, fishing or handicrafts. Local people should benefit from conservation and the sustainable use of natural resources. This makes them more accepting of conservation areas and more likely to protect their boundary zones and biological corridors.

Madagascar: protecting ecosystems, combating poverty

Madagascar is a biodiversity hotspot. Its diversity ranges from lemur and chameleon species to tropical rainforests, high-altitude cloud forests and dry forests. Nearly three quarters of animal and plant species are only found there, making them endemic. However, this natural paradise is threatened by a wide range of user interests. For example, the country is losing forest area; since the turn of the millennium by an average of more than 1% per year – mainly due to clearing for agriculture, for the extraction of charcoal, due to illegal logging of exotic woods, but also and above all due to forest fires. In 2022 alone, with an area of around 9,000 hectares, more forest was lost than in years. It is now difficult to find pristine landscapes and primary forests outside of protected areas, meaning that these play a particularly important role in preserving biodiversity in this island nation.

Madagascar has 143 protected areas with a total area of over 7.6 million hectares. Of these, 43 protected areas are managed by the Madagascar National Parks (MNP) organization, which, however, faces numerous challenges. Some of the small protected areas are spread across the country, and the park administration has insufficient personnel and funds to effectively protect nature. This is why MNP needs international funds to manage the parks efficiently. KfW will promote MNP with EUR 29 million by 2028 on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), making it its most important bilateral donor. Some of the funds are passed on to NGOs working in coastal and marine conservation.

Madagascar is particularly rich in species but is among the world's poorest countries. This is why it is important to preserve biodiversity here, both as a global public good and as the basis for the people's livelihood. MNP also takes the local population's concerns into account in a highly targeted manner. The example of the Ankarafantsika National Park in the northeast of the country illustrates what this means in practice. It has the highest level of protected status, meaning that hunting and logging are prohibited. Nonetheless, its existence is beneficial to local people because it acts as a fundamental reservoir, providing water for the neighbouring rice fields. The population also benefits from income from paid monitoring activities as well as marking and maintenance work, among other things. Local people can also have their say in park management, they carry out the majority of patrols and are responsible for other work in the conservation area. MNP operates similarly in the other parks.

Meanwhile, around two thirds of the area of the promoted MNP protected areas is managed by inclusive and representative bodies; these bodies are made up of legitimate representatives of the park's neighbouring communities. In addition, the development and maintenance of infrastructure is also intended to stimulate ecotourism. For example, in 2022, MNP renovated 330 kilometres of road network, 22 campsites, 10 welcome stations, 91 kilometres of access roads and a visitor centre. KfW and MNP have also undertaken to comply with World Bank standards setting out the procedure to be followed if protective measures do impose certain restrictions.

With the help of KfW investments, the number of high-threat national parks decreased from 24 in 2018 to nine in 2023. Fire-fighting and fire prevention measures, such as fire protection strips, new machinery and awareness-raising measures, also made an important contribution to this. In addition, around 4,800 hectares of forest were restored in 2022 alone. There have also been complementary measures such as the construction of schools, health care centres and a better water supply.

In addition to supporting MNP, KfW has also promoted the *Fondation pour les Aires Protégées et la Biodiversité de Madagascar* (FAPBM) since 2011 on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ). The FAPBM works to preserve biodiversity in Madagascar by promoting the conservation and strengthening of protected areas. The foundation makes a significant contribution to the sustainable financing of the Madagascan protected area system by covering the costs of wages and running costs. In 2024, it already supported 70 protected areas in Madagascar. The operation of the FAPBM as a conservation trust fund enables long-term financing of costs far beyond normal project durations.

A biodiversity hotspot

Madagascar is particularly rich in species. Nearly three quarters of animal and plant species are only found there, making them endemic. KfW helps to preserve this "paradise".

In recent years, the FAPBM has become one of the most important players in biodiversity protection in Madagascar. The German state has so far paid around EUR 87 million into the FAPBM's perpetual fund via KfW and is thus by far the most important donor of the foundation, which now has capital of over USD 150 million. This makes the FAPBM the largest trust fund for biodiversity protection in Africa at present.

The foundation also has a direct influence on the well-being of the local population. In 2023, nearly 38,000 people benefited directly from FAPBM financing, and 19 value chains received support. In addition, more than 3,000 jobs were created. Indirectly, the effect is even greater: 13.5 million people benefit from the ecosystem services of the supported protected areas.

For poorer countries or countries with limited income from tourism resulting from conservation areas, the task of keeping things running and covering costs for things like fuel, spare parts, renovations and PR work, can be a huge challenge. It is therefore all the more important to make sure partner countries receive support in setting up permanent financing mechanisms for their conservation systems.

For this reason, KfW has spent the past few years helping to set up a number of environmental funds, known as Conservation Trust Funds (CTFs), usually in the form of non-profit charitable trusts. These trust funds normally receive public and private funds and — using recurring revenues and interest income — permanently contribute to the financing of conservation areas. KfW currently promotes 16 legally independent CTFs with a total volume of around EUR 1 billion in ongoing commitments from Financial Cooperation in sinking and endowment funds. These help to permanently maintain 263 protected areas covering an area of over 770,000 km² (see Appendix 1).



The Caucasian leopard is alive, not least thanks to a proactive conservation policy. Photo: WWF Caucasus / wildlife camera

Caucasus: a foundation for the good of nature

With the Caspian Sea on one side and the Black Sea on the other, the Caucasus is a biological crossroads. Plant and animal species from Europe, Central Asia, North Africa and the Middle East come together. No fewer than 6,400 species of vascular plants alone, such as mosses and ferns, grow here. There are also many species that can only be found in the Caucasus, such as the Caucasian black grouse and the Caucasian leopard. The variety of the nature there is so significant that WWF and Conservation International class the region among the three dozen most important biodiversity hotspots in the world.

Ecosystems are at great risk in the Caucasus, too. Dozens of the region's species are on the red list for being at the brink of extinction due to deforestation or the construction of large roads and bridges. In order to counteract this trend, the three Caucasian countries Armenia, Azerbaijan and Georgia placed approximately 11% of their area under environmental conservation. However, their governments lacked the funds to sustainably manage the protected areas and to use agricultural and animal husbandry practices that are in tune with nature in the surrounding area.

That is why the Caucasus Nature Fund (CNF) was set up in 2008 as a conservation foundation that was intended to permanently close the financial gap and help to preserve biodiversity. It is now recognised as a stable and constant financing partner and it supports protected areas in Armenia and Georgia. It is steadily expanding its programme and is now contributing financially to 21 conservation areas, covering around 851,000 hectares of land. CNF not only finances operating, salary and procurement costs, for example for rangers and park employees, fire engines and jeeps, but also with the implementation of management plans in accordance with international standards.

The German Government has played an active role in promoting the establishment and development of the CNF and it has contributed EUR 95.7 million to date through KfW. The fund also receives significant support from WWF and other donors, including private donors. Since 2018, KfW has also been financing eco-corridors on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ). These connect multiple conservation areas with one another. This turns individual patches of unspoiled nature into a species-rich mosaic of protected habitats, piece by piece. To enable the process, agreements are concluded with communities and participatory plans are developed for biodiversity-friendly land use. The conservation agreements include compensation for initial loss of income and assist with the transition to sustainable and more productive land use. The project thus makes an important contribution to rural development, especially for remote, poor communities.

And in this manner, the eco-corridors preserve biodiversity in two ways. They increase biodiversity due to the more careful interaction with nature in itself. Through the connections that they build between the conservation areas, they also enlarge the habitats and migration routes, primarily for wild animals – especially those at risk of extinction. And above all, they create a more harmonious relationship between humans and nature because they allow enough room for both to live and go about their business. The combination of conservation through the CNF, eco-corridors and the local population has proven particularly effective.

A nature fund

A fund for sustainable conservation financing in the Caucasus was set up back in 2008. It blazed a trail for numerous other funds.

3.2 Forest conservation and management

Forests fulfil a wide range of important ecological functions, are among the most biodiverse ecosystems in the world and provide essential ecosystem services. As the "lungs of the world", they provide oxygen, bind carbon, regulate the climate and water cycles, protect against erosion and thus prevent the accumulation of silt in hydropower plants, they store drinking water, produce valuable natural resources, food and medical products, act as a buffer against storms and host a wide range of endangered species. Especially in rural parts of many poorer countries, forests are also a potential economic factor that offers long-term development prospects.

People have been transforming areas of forest for millennia, mainly so they can be used for agriculture. According to estimates, over half of all the forest areas around the world have already been deforested or lost their original function. In 2023 alone, 3.7 million hectares of

Home to flora and fauna

Forests are the habitat of more than 75% of all land-dwelling animal and plant species.

species-rich tropical forests were destroyed. In the three Rio Conventions and international environmental processes in general, the protection and restoration of forests plays an important role, and the declaration of a United Nations Decade on Ecosystem Restoration in 2021 underlines this once again. In total, 115 governments have committed to restoring around 1 billion hectares of land.⁵

Global: protecting the climate, preserving biodiversity

Climate change and biodiversity loss are two key challenges of our time. If drastic measures are not taken, our planet will be on track to experience an overall temperature increase of more than three degrees. One way to counteract this is to strengthen natural ecosystems and habitats. They can help to preserve biodiversity and slow down global warming by storing CO₂. This applies, for example, to moors and forests, but also to wood used in construction. According to the World Resources Institute, forests alone store around 7.6 billion tonnes of additional CO₂ each year.

Making greater use of such nature-based approaches for climate change mitigation and preserving biodiversity requires large-scale mobilisation of additional capital. Current financial flows have to nearly triple by 2030, and the share of private investment has to increase significantly. However, for more private funds, the potential that can arise from the remuneration of ecosystem services has not yet been sufficiently exploited. This is also particularly true of the voluntary CO₂ market, which can provide incentives for nature-based climate action.

This is precisely where the WALD Initiative comes in. WALD is the German acronym for the Worldwide Alliance for Landscape-based Decarbonisation. The initiative works on behalf of the German Federal Government and bundles various approaches. It mobilises the private sector in order to better promote natural carbon stores. On the one hand, this benefits nature. On the other hand, companies are able to take concrete action for climate action.

WALD is a joint initiative between KfW and the Landwirtschaftlicher Rentenbank, and consists of four components, two of which are in Germany and two abroad. With the Innovation Facility, the first (international) element was launched in 2024 and presented to the general public. It promotes forward-looking approaches with great potential to create more high-biodiversity carbon sinks. The focus is on new types of projects that, due to their innovative nature, are not yet receiving sufficient financing, for example seagrass meadows and agroforestry. The WALD Innovation Facility awards grants as part of competitions. The other components of the WALD initiative are to follow and become operational gradually.

WALD initiative

The initiative brings together various components and approaches to promote carbon sinks and mobilise the private sector to do so.

⁵ <https://www.pbl.nl/en/publications/goals-and-commitments-for-the-restoration-decade>



Rich forests, a plethora of species. Madagascar's fabulous nature is also at risk. Photo: Alice Elfert.

German forestry, the origin of the 300-year-old concept of sustainability, has extensive expertise in forest management and can thus support partner countries in this area in particular. It has strong knowledge, especially in the field of near-natural forest cultivation that preserves biodiversity and ecosystem functions — knowledge that is important for financial cooperation. Near-natural forest cultivation has become something of a German export, which KfW has been promoting across the globe for over 25 years. German universities are recognised worldwide and have special expertise in this area. The Forest Stewardship Council (FSC) is also headquartered in Germany and certifies wood and wood products from sustainable forestry.

KfW finances afforestation and the ecological restoration of forests on behalf of the German Federal Government. As a result of economic development and land speculation, there is enormous deforestation and forest conversion worldwide, with corresponding consequences for the water supply, air quality and agriculture. Restored and varied forest landscapes help to provide ecosystem services globally and to the local population. In addition to restoration, the bank also promotes the sustainable management of existing forests, especially in Asia and Latin America. The sustainable use of forests must always be in harmony with the local population and respect their needs with regard to forest resources. Depending on the region in question, KfW programmes for forest management are often a combination of the following elements:

- **Investment in control and management infrastructure for state authorities** in order to improve local legal and investment security, for instance through decentralised administration and checkpoints, vehicles, control technology and training.
- **Investment in local infrastructure** in order to develop forests, for example, with investments in rural roads and in areas of forestation and forest management
- **Promotional funds and programmes for local and indigenous forest owners** in order to provide incentives for sustainable management, such as the promotion of individual afforestation.

In addition to reducing CO₂ emissions by avoiding deforestation (Reducing Emissions from Deforestation and Degradation (REDD+)) and promoting something known as deforestation-free supply chains, forest and landscape restoration (FLR) is one of the three pillars that form the basis of the Federal Ministry for Economic Cooperation and Development's international forestry policy. KfW finances relevant projects in all three areas.

Forest, forest, forest

An estimated 1.6 billion people, or 25% of the world's population, rely on forests for their survival, their livelihood, their employment and their income.

Restoring forest landscapes

Restoring and reforesting transformed or degraded forests and tree-rich landscapes is an important objective of the international community, not least for reasons of species conservation, climate protection and the promotion of rural development. One concept in this area is FLR, which deals with ecological and social improvements. This means that it combines a forest's ecological functions with its productive use, from which the local population can benefit in turn, for example through increased income. The FLR approach also includes agroforestry systems⁶ which have environmental and economic benefits. They increase biodiversity and make cultivation more resilient to the consequences of climate change. Furthermore, they help to keep soil fertile and reduce erosion, which in turn makes plants more resistant to pests and reduces the use of pesticides.

FLR contributes to the achievement of the SDGs set out in the 2030 Agenda by, among other things, securing the supply of food and power, fighting poverty, preserving biological diversity, and protecting the climate. In the 2014 New York Declaration on Forests, the international community decided to restore 350 million hectares of degraded forest landscape by 2030. This new target corresponds to an area the size of India. The German Federal Government also signed the declaration. Participants in New York also agreed to end global deforestation entirely by 2030. During the 2021 Climate Change Conference in Glasgow (COP 26), more than 140 countries with more than 90% of the world's forest area (including Germany) confirmed these goals again with the Glasgow Leaders Declaration on Forests and Land Use. In addition, Germany and another eleven governments there committed to providing USD 12 billion in climate financing for forests from 2021–2025 through the Global Forest Finance Pledge. At COP 27, Germany increased its share of the pledge from EUR 1 billion to EUR 2 billion. FLR can play an important role in this process.

Together with Norway and the United Kingdom, Germany signed up to the GNU Initiative, which aims to extend the commitment under the New York Declaration using joint programmes and improved coordination. In 2015, the New Partnership for Africa's Development (NEPAD⁷), the German Federal Ministry for Economic Cooperation and Development (BMZ), the World Bank and the World Resources Institute (WRI) set up the African Forest Landscape Restoration Initiative (AFR100) with the aim of restoring 100 million hectares of forest and tree-rich landscapes by 2030. Since then, 34 African countries have committed to restoring approximately 130 million hectares of forest – even more than originally planned. KfW has already allocated commitments for Ethiopia, Cameroon and Madagascar for AFR100.

Deforestation-free supply chains

A key driver of global deforestation is the conversion of forests into agricultural land to enable the production of beef, palm oil and soya, for instance. In order to reduce deforestation rates, the Federal Ministry for Economic Cooperation and Development (BMZ) is promoting deforestation-free supply chains which use sustainable agricultural crop cultivation methods and land use systems. Deforestation-free supply chains bring forest conservation and sustainable agriculture into harmony with each other.

Through the eco.business fund, KfW supports deforestation-free, resource-conserving and biodiversity-friendly production methods in Latin America and Sub-Saharan Africa. The innovative fund structure uses public funds to break down barriers in the market and mobilises additional private capital for small and mid-sized enterprises that produce to voluntary sustainability standards. This enables the fund to not only establish alternative production methods and corresponding sustainability standards, but it also simultaneously acts as an instrument for redesigning the financial system and the economy to make them more ecologically friendly.

Restore

One concept that describes the restoration and afforestation of forests where logging has taken place or which have been degraded is known as FLR: Forest Landscape Restoration.

It combines environmental protection with productive use of the forest.

⁶ Agroforestry combines elements of agriculture with forestry.

⁷ Now the African Union Development Agency (AUDA).



Sustainable coffee production in Nicaragua. Photo: Thomas Buhl.

Latin America and Africa: eco.business fund

In Africa in particular, despite significant progress, hunger and malnutrition remain a serious problem. The situation is exacerbated by a population growth rate that is among the highest in the world. In the battle against hunger, Africa needs not only more agriculture, but also more intensive agriculture. However, farming cannot be expanded at the expense of the environment and the climate if it is to become a sustainable long-term model. This means that Africa must reconcile its economic growth and its increasing demand for food with environmental principles.

This is why the economy must transform into a “green economy”, which requires incentives and capital. The eco.business Fund works towards this goal and promotes economic activity that contributes to the sustainable use of raw materials and the preservation of biodiversity. It also helps to mitigate climate change and adapt to its negative impacts. It was established in 2014 by KfW Development Bank on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), working in partnership with Conservation International and Finance in Motion. It focuses on agriculture and forestry, tourism, fishing and aquaculture.

The eco.business Fund only supports companies that use sustainable production processes or specially defined measures that have a positive effect (green list measures). To this end, it brings together private and public investors who assume different levels of risk. The involvement of public institutions creates a risk buffer for other investors – this makes the fund more appealing and attracts more private capital. In Latin America in particular, the fund grants “green credit lines” to local banks, which in turn extend loans to local companies. With the expansion to Africa, the fund concept was also broadened and also includes investments directly in companies and cooperatives. Companies must have sustainability certificates from the Rainforest Alliance or FSC, for example, or be striving to acquire them or implement a sustainable measure that meets the green fund principles.

The eco.business Fund began its work in Latin America and the Caribbean where it has disbursed loans of more than USD 3 billion to ultimate borrowers since its formation. Given its success, an offshoot was also set up in Sub-Saharan Africa in 2019. The focus is on production practices that preserve forests. In this manner, the fund has promoted the cultivation of sustainable cocoa in Ecuador and the Ivory Coast, environmentally friendly coffee in El Salvador and sustainable certified tea in Kenya, for example. In total, it has so far contributed to the sustainable management of more than 1.1 million hectares of arable land and to protecting almost 440,000 hectares of land from deforestation as well as saving 5.2 million cubic metres of water; this is roughly equivalent to the amount of water in 2,170 swimming pools. In addition, almost 24 million tonnes of CO₂ were stored through agroforestry activities, which corresponds to the emissions of more than 2.6 million people in Germany per capita per year, and 660,000 jobs were maintained or created in the eco-sector.

Green economy

Restructuring the economy to improve sustainability is an important mission for our age, and one that KfW is committed to.

Compensation for preventing deforestation

In order to reduce greenhouse gas emissions owing to deforestation, the countries that are party to the UN Framework Convention on Climate Change (UNFCCC) have agreed the REDD+ approach. The basic concept consists of rewarding governments and local people for preventing and reducing deforestation. The conditions and the methodological rules and regulations for results-based payments were defined in what is known as the Warsaw Framework in 2013. In order to prevent displacement of deforestation within a country, evidence must be provided of forest conservation and CO₂ savings at national or at least regional level.

KfW is implementing the REDD Early Movers Programme (REM) on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ). It aims to reward pioneers in the protection of forests and the climate for services to forest conservation. So far, five components of the programme have been implemented in three countries: in the Brazilian states of Acre (one phase completed, one ongoing) and Mato Grosso, in Colombia and in Ecuador. In addition to the Federal Ministry for Economic Cooperation and Development (BMZ), the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), Norway and the United Kingdom participate in the financing. By 2021, EUR 195 million was paid out for avoided deforestation, emission reductions of almost 46 million tonnes of CO₂ equivalents (tCO₂e) were compensated and retired; this means that they cannot be compensated again. This corresponds to the annual CO₂ emissions of around 25 million cars in Germany. In addition, the REM partner countries have discontinued a further 42 million tCO₂e as their own contribution and as risk provisioning, meaning that the programme has already achieved an overall contribution of 88 million tCO₂e towards climate protection.

A reward

With REDD+, local people are rewarded for preventing and reducing deforestation. The funds are only disbursed when evidence of CO₂ savings is provided.

Ecuador: REDD for early movers

Due to its enormous diversity of trees, Ecuador is one of the ten most species-rich countries in the world. But deforestation is also a problem here: the expansion of agriculture is considered to be one of the main reasons for this. Forests are being converted into agricultural land, especially in the country's coastal and Andean regions. In addition, illegal and unsustainable use of wood is degrading and thinning out forest areas.

But Ecuador is participating in the REDD Early Movers programme. BMZ has made EUR 11 million available for the first phase of the project. In addition, the Norwegian government is funding the project with NKR 300 million (approx. EUR 30 million). As a result, full remuneration for the reduction in deforestation rates has been made retroactively for the years 2015 to 2019. Two REM follow-up phases are planned in Ecuador for the years 2024 to 2028.

The Federal Ministry for Economic Cooperation and Development (BMZ) has committed EUR 8.4 million and EUR 15 million for this. Up to 70% of the funds from phase one and the two subsequent phases are going towards local measures for forest conservation as part of the benefit sharing component. This includes promotion of forest conservation by rural and indigenous communities, restoration and afforestation activities, direct promotion of sustainable products (non-wood forest products), commercialisation of deforestation-free products and the financing of initiatives by indigenous communities.

In the first phase, more than 4,500 families benefited, and more than 2,600 municipal associations concluded arrangements for the conservation of local forests (as of 2023). Phases two and three are set to focus in particular on the promoting the empowerment of women in rural regions. A total of 30% of the funds of the benefit sharing component will go to strengthening structural measures in the area of national forest and environmental policy.

3.3 Coastal and marine protection

The world's oceans cover a good 70% of our planet and play a central role in sustaining life on Earth. They fulfil important climate-regulating functions, produce half of the world's oxygen and make a key contribution to food security thanks to their high level of biodiversity. Fish are a crucial source of nutrition for nearly three billion people. More than 500 million people around the world are directly or indirectly dependent on fishing. For these people, coastal regions are simultaneously a place to live and a place to work. The majority of fishing takes place in developing countries, where increasing numbers of people are gathering in coastal regions. Today half of the world's population already lives in these areas.

Marine ecosystem

The oceans produce half of the world's oxygen, trap CO₂, provide food for much of humanity and boast high levels of biodiversity.

Overfishing of the world's oceans has gradually become a serious problem. Around 90% of fish populations are deemed to be fully exploited or already overfished. Aquacultures are playing an increasingly important role, supplying around half of the fish consumed by humans. For decades, aquacultures have been the fastest growing sector in global food production, rising by around 8% each year.



Intact underwater world. Photo: coral reef image bank / Photographer: Jayne Jenkins

Global: a “blue fund” for marine conservation

Off the coast of Ecuador, Colombia, Panama and Costa Rica, the Pacific is particularly rich in different species. It is also home to the legendary Galapagos Islands with their unique flora and fauna. These islands are now a UNESCO World Heritage Site, and parts of the eastern Pacific Ocean surrounding them are also protected. However, the area's biodiversity makes it economically attractive as well and it is therefore at risk of being heavily exploited and overfished.

In order to reconcile ecology and economy, several projects financed by the Blue Action Fund support the protection of the sea around Galapagos (Ecuador) and Cocos Island (Costa Rica). The area is located hundreds of kilometres off the Pacific coast and contains more than 1,600 species of marine fauna and flora. The NGO Conservation International (CI) helps local communities to practice sustainable fishing methods. This includes better equipment, warehousing and fish processing, as well as management and control plans to protect stocks. EUR 3.7 million will go to the Cocos Island project. In addition, the protected area there has been extended by 150,000km², now offering protection to over 30% of Costa Rica's waters.

The project is one of 29 projects promoted by the Blue Action Fund in Latin America, Africa and Asia. It aims to preserve marine biodiversity for future generations and it invests in coastal and marine conservation around the world in order to achieve this. The Federal Ministry for Economic Cooperation and Development (BMZ), in collaboration with KfW, established the fund in 2016 in the legal form of a non-profit charitable trust. It finances NGO projects, enabling them to expand their work.

Support is available for projects that establish new conservation areas, expand or better manage existing ones and improve the living conditions of local communities through sustainable management of marine resources. Interested NGOs can submit project proposals. When selecting projects, the fund observes any national and regional protection strategies and makes sure projects are consistent with the UN Convention on Biological Diversity, the 2030 Agenda and the Federal Ministry for Economic Cooperation and Development's (BMZ) 10-point action plan for marine protection. The International Union for Nature Conservation (IUCN) supports the BAF during project selection.

In addition to the Federal Ministry for Economic Cooperation and Development (BMZ), Sweden, France (through AFD) and KfW are represented on the charitable trust's Supervisory Board. The fund now has foundation capital of over EUR 190 million provided by the Federal Ministry for Economic Cooperation and Development (BMZ), France, Norway, Ireland and the Swedish government. The Green Climate Fund has committed

Blue Action Fund

The fund now supports 29 marine conservation projects worldwide, and its foundation capital is EUR 190 million.

EUR 30 million, with further financiers to be added over time. And with each additional financier, the commitment to the oceans and coasts can be further increased – around the Galapagos Islands and elsewhere.

Nevertheless, this growth also goes hand-in-hand with growing demand for fish meal and oil from the wild catch fishing sector for feed. Moreover, non-sustainable production methods used in aquacultures can be just as dangerous as destructive catching methods. This makes private certification initiatives such as the Marine Stewardship Council (MSC) and the Aquaculture Stewardship Council (ASC) all the more important; their market share in western industrial countries is growing. These measures enable consumers to promote sustainable aquacultures and fishing methods by making conscious purchasing decisions.

Climate change will continue to increase the temperature of the oceans and cause sea levels to rise, with the result that coral reefs around the world will die off, making thousands of kilometres of coastline more vulnerable to storm tides. In addition, the refuge areas of many fish species will be lost. Marine and coastal protection are correspondingly important. Scientists recommend protecting 30% of the world's oceans by 2030, similar to the recommendation for protecting land area. The German Federal Government shares this goal, which KfW is helping to implement. But to date, only around 8% of the ocean is protected – and some of this is only a reality on paper. Thanks to modern satellite monitoring and transponders, there are effective methods for checking whether protection restrictions are being violated. However, many partner countries lack monitoring capabilities, even though sufficient revenue could be generated to pay for these from commercial fishing licences. The political will and participatory fisheries management are crucial if this is to happen.

In addition, increasing pollution is also affecting the world's oceans. Millions of tonnes of plastic can be found in our oceans today, and each year, an estimated 5–12 million tonnes are added to that amount. Five giant plastic waste vortexes have now formed from it.

KfW promotes marine conservation as part of Financial Cooperation (FC) with developing countries. Firstly, directly through projects to protect and preserve marine biodiversity, aquaculture and fishery. And secondly, indirectly through projects to improve land-based waste management and sanitation. The latter is done to reduce or prevent the discharge of pollutants and waste into the sea. Compared to other promotional measures in this area, FC's marine conservation portfolio is still being established, is volatile and has shown declining growth for four years. In 2020, KfW Development Bank's commitments to SDG 14 amounted to around EUR 240 million, around EUR 202 million in 2021, around EUR 120 million in 2022 and around EUR 212 in 2023. This is a weighted commitment volume. This means that all projects with the BTR 1 marker (biodiversity conservation is a secondary objective) are counted at 20% and BTR 2 (biodiversity conservation is the primary objective) at 100%. With this weighting, the total volume of all 74 ongoing marine projects is EUR 1,054 million, with three projects without BTR markers amounting to EUR 50 million.

In June 2021, KfW Development Bank joined the Sustainable Blue Economy Finance Initiative to mobilise more investments to conserve and sustainably use the oceans and marine resources (SDG 14) in conjunction with other development banks and organisations. In this context, it also signed the Cartagena call for more cooperation for the protection of our world's oceans and the sustainable use of marine resources in 2023.

In order to make marine protection even more effective, KfW has also established various international funds, each of which is unique in its type. Through the Blue Action Fund, KfW promotes efforts to establish new protected areas, expand or more effectively manage existing ones, and improve and permanently safeguard the living conditions of local communities through sustainable practices. In launching the Clean Oceans Initiative, KfW, the European Investment Bank (EIB) and the French development agency AFD set up an initiative in 2018 for combating marine waste in developing countries and emerging economies. Two years later, the Spanish promotional bank ICO and the Italian Cassa Depositi e Prestiti (CDP) were added, as well as the European Bank for Reconstruction and Development (EBRD) in 2022. As a result, the COI now includes six European development banks. At the 2022 One Ocean Summit, the participating banks extended the initiative until 2025 and increased the joint commitment target to EUR 4 billion. Promotion will focus on the management of solid waste, waste water and rain water. This last area is important because large quantities of plastic waste are washed into rivers and oceans during heavy rainfall.

Coral at risk

Around a quarter of all marine species live in coral reefs; however, in 2030, 90% of these were put at risk through human activities and climate change.

For the eco.business Fund (see the box on p. 17), the share of projects related to fisheries and aquaculture is around 21%. And these are just three examples of KfW's growing marine protection portfolio.

4. Outlook and trends

International conservation is largely determined by the UN Convention on Biological Diversity (CBD). On this basis, the international community adopted the Global Biodiversity Framework (GBF) in Montreal at the end of 2022, which will guide actions until at least 2030. The GBF is regarded as a historic moment in international biodiversity policy because it has significantly increased the level of ambition.

It is clear that nature and its services can only be preserved in the long term if biodiversity becomes a prime objective of international policy, if it is seen as part of the climate crisis and not separately, if the trend of increasing land use for agriculture reverses, if crises do not push the issue into the background, if the private sector also contributes to the protection of biodiversity and if the benefits of digitalisation are used more than before for nature conservation. This is reflected in the following trends which will also play a large role for KfW's focus going forward.

Trend 1: "Implementing Montreal"

The GBF is, as the name suggests, a framework agreement that must be cast into biodiversity strategies and action plans, called NBSAPs,⁸ and then implemented. This applies in particular to the 23 concrete targets, which include protecting 30% of the Earth's surface by 2030. Effectively and fairly managed conservation areas are a key way to preserve nature's riches. The 30% is a global target, but the understanding is that each country must fulfil this 30%. Especially for developing countries, this is not an easy undertaking, because although there is particularly rich biodiversity in general, for example in the Andes, the Congo Basin or the southern slope of the Himalayas, many of these nations lack the money to operate effective nature conservation.

For example, there is a risk that even if the target is achieved numerically, protected areas only exist on paper and the quantity is at the expense of quality. This means that at the same time, the management of protected areas must be improved, governance must be more transparent and inclusive, and justice issues, especially those relating to conflicts of use and objectives, must be addressed.

Protecting 30% of the Earth's surface cannot mean identifying further more traditional protected areas with large unused areas. This is because there are large areas that are used by the local, often indigenous population and still preserve biodiversity. These types of Other Effective Area-based Conservation Measures (OECMs) are of central importance for the further protection of biodiversity, as they offer the opportunity to preserve nature in consultation with the population – if corresponding land and usage rights are recognised.

KfW Development Bank's contribution

KfW Development Bank's aim is to fully preserve natural habitats. KfW also supports OECM areas, e.g. areas free of deforestation, which the local population uses in ways that are aligned with supporting biodiversity. KfW is also committed to ensuring that conservation areas are managed more effectively, that local communities are more involved and that they have alternative income generation methods. Furthermore, KfW is supporting partner countries in developing long-term financing mechanisms, such as through conservation trust funds (CTF) or eco and green funds. These funds support private companies that have a positive effect on conservation, typically in the sustainable agriculture, fishing, agroforestry, ecotourism and green infrastructure sectors. CTFs use a regular stream of income and interest to help secure the financing of protected areas for the long term. However, simply financing green projects is not sufficient. Rather, the aim is to achieve positive effects on biodiversity in other sectors as well ("mainstreaming"). This applies, for example, to the agricultural and financial sectors. Green, nature-based solutions (NbS) can also have major effects in the area of urban development or in the water sector, and even be superior in comparison to so-called "grey" concrete measures.

⁸ National Biodiversity Strategies and Action Plans

Moreover, KfW Development Bank is working closely with conservation organisations in an effort to make the most of their specific strengths. The Worldwide Fund for Nature (WWF), the Frankfurt Zoological Society (ZGF) and the International Union for Nature Conservation (IUCN) are particularly notable. KfW has concluded special agreements with all of them.

Cooperation

KfW Development Bank maintains particularly close partnerships with WWF, the Frankfurt Zoological Society and the International Union for Nature Conservation (IUCN).



National park in Cameroon. Photo: KfW Photo archive / Fred Hoogervorst

Trend 2: Dual crisis of biodiversity and climate

Biodiversity and global warming are closely linked, as climate change is among the main drivers of extinction. The overall risk of species dying out increases greatly as the temperature of the Earth rises. According to the World Biodiversity Council, between 3 and 14% of all species studied on land would be very seriously threatened with extinction with a temperature increase of even 1.5 degrees. At three degrees, which we are currently heading for if there is not a drastic change in climate protection, this amounts to almost 30% of all terrestrial species, and at four degrees, up to 40%. The world would be different place. Therefore, it is also crucial for nature that we limit global warming to less than two degrees, just as the international agreements on climate protection intend.

On the other hand, intact ecosystems are essential to climate change mitigation and adaptation because they store more carbon than degraded systems and are better able to cope with the effects of climate change. Despite this connection, practices that damage biodiversity, such as afforestation with monocultures that offer little habitat for flora and fauna, are used in some cases for climate change mitigation and adaptation. Nature-based solutions in particular have great potential. According to the World Economic Forum, they could reduce a third of the emissions needed to reach the 1.5 to 2 degree target and would also be significantly cheaper than other forms of CO₂ reduction. Instead of relying on technical solutions, NbS use intact ecosystems to address climate change, improve human well-being and secure biodiversity.

Coral reefs and mangrove forests, for example, are nature-based alternatives to coastal protection using walls. They are important spawning areas for fish and can help secure food and income for coastal inhabitants. Astonishingly mangrove forests store up to three to five times as much CO₂ as forests on land. The success of NbS is dependent on acceptance by the local population, so participation and transparency are crucial. The biggest challenge of any resource management is often that it translates into limited access to resources. It is therefore advisable to promote participatory management and sustainable use of resources so that user groups better adopt and support nature-based approaches.

Yet the biggest obstacle for NbS is climate change itself. For example, if the upper layers of the ocean are already too warm and too acidic, it is becoming increasingly difficult to save coral reefs by protecting or restoring upstream mangroves and seagrass meadows. All three habitats interact with each other and together can increase their respective resilience to climate change.

A major topic

Species conservation and climate change belong together. Climate change is among the five main drivers of extinction. In turn, species dying out increases the risk of higher temperatures on Earth.

Greater awareness

Biodiversity loss and climate change are among the greatest ecological risks of our time. However, in contrast to climate change, there is a lack of public awareness of biodiversity loss.

Intact coastal forests and mangroves help reduce sediment loads into coral areas, and intact seagrass meadows can bind excess nutrient input. Too much sediment and too many nutrients are major stressors for corals, making them more susceptible to coral bleaching from temperature increases. Together with mangrove forests, intact corals can protect entire coastal strips, including seagrass meadows, from storm-related destruction. The following applies in general: the earlier NbS are used, the better they work and the more cost-effective they can be.

KfW Development Bank's contribution

KfW Development Bank is among the largest financiers of climate protection and biodiversity. Currently, the entire KfW Group is consistently focusing on sustainability and is working on solutions to help it record the effects of its financing and make them transparent. Environmental and social risks can then also be systematically assessed and managed. These measures will not only further advance KfW, they will also facilitate our role as an opinion-forming institution with a formative presence. In its global activities, KfW Development Bank will support NbS approaches even more strongly in the future. This includes the protection, sustainable use and restoration of ecosystems.



Zebras in Mozambique – also a biodiversity hotspot. Photo: KfW Photo archive / photothek.net

Trend 3: Biodiversity protection and agriculture

Changes in land use are currently the biggest driver of biodiversity loss, according to IPBES. Today, 37% of land is already reserved for agriculture meaning that there is more land area designated for farming than for forests, where biodiversity is generally particularly high. This means that deforestation must urgently be put to a stop and is why KfW is committed to deforestation-free supply chains. However, agriculture can also play a major role in maintaining biodiversity,

More diverse cultivation methods – such as agroforestry systems and companion planting – harbour a significantly greater diversity of plants and animals than monocultures. Instead, the “industrialisation” of agriculture is increasing in many countries. Pesticides and fertilisers are also used abundantly in industrialised agricultural systems, with negative impacts on the environment. But reducing their use can have a positive effect on biodiversity in the soil, on farmland and in the agricultural sector. A mix of organic farming and higher efficiency (instead of higher land use) could sustainably increase yields in developing countries, while contributing to greater security of food supply and combating hunger on the one hand while preserving biodiversity on the other.

KfW Development Bank's contribution

KfW is committed to sustainable cultivation and land use methods, with these activities implemented via funds such as the eco.business Fund and the Fairtrade Access Fund. Agroecology is also playing an increasingly important role in KfW's work. This holistic approach promotes positive relationships between soils, plants and animals. Some of the methods include

diversification and reduction of agrochemicals, with the aim of moving towards a sustainable food system. In Central America, for example, KfW promotes traditional farming methods and crop varieties in agriculture. KfW also supports agroecology programmes in India. A million smallholder farmers will soon be taking part. Applying these agroecological principles can also help to mitigate climate change, since vegetation and soils usually store more CO₂ as a result. A lower increase in the earth's temperature, in turn, has positive effects on biodiversity.



Tropical coastal forest in Brazil – a landscape important to preserve. Photo: KfW Photo Archive / Rüdiger Nehmzow

Trend 4: Biodiversity protection despite crises

The world is currently dominated by multiple crises. The coronavirus pandemic was barely over when Russia's war of aggression began in Ukraine; the conflict in the Middle East followed. A new systemic competition is emerging, military spending is increasing worldwide, and democracies are under pressure. In addition, there is a growing number of fragile countries in which the state is failing or where internal power struggles and conflicts make providing state services impossible. According to the OECD, almost two billion people now live in fragile contexts. Added to this are government debt, inflationary trends and a slowing global economy.

Against the backdrop of these multiple crises, there is a risk that biodiversity issues will be viewed as secondary. Economy first or safety first quickly becomes the motto. Species protection is further down the list. But even if crises cost energy and consume funds, they should not sacrifice the preservation of biodiversity. This may be beneficial in the short term, but in the long term it jeopardises the benefits of ecosystems, which we depend on in many respects, and also reduces global food security and economic productivity.

Instead, we need to continue focusing on nature conservation. For this to happen, the global distribution of food must also improve, and eating habits must change. This would make a great deal of difference even in times of crisis. In Germany, for example, around 60% of the annual grain harvest goes to the production of animal feed, while in other regions grain is becoming scarce or too expensive. A largely plant-based diet, as suggested by the Lancet magazine, for example, would be better for biodiversity, the climate and healthier for people ("one health approach").

KfW Development Bank's contribution

KfW maintains its extensive commitment to protecting biodiversity and improving rural development, even in times of crisis. Protecting and restoring ecosystems and designating protected areas and protected area corridors secures natural habitats. At the same time, KfW Development Bank promotes the sustainable use of natural resources, for example through organic farming.

Trend 5: Mobilising the private sector

Engagement during crises

Especially in times of crisis, such as now, when multiple challenges coincide, the continuous promotion of biodiversity is particularly important.

Around the world, about USD 100 billion goes towards preserving biodiversity each year. However, much more is needed each year. There is a chronic shortfall here that is likely to increase further. It is therefore necessary to enable more promotional business volume not only in directly protecting biodiversity, e.g. through protected areas, but also in converting production methods towards more biodiversity-friendly use of natural resources. That is why cooperation with the private sector is becoming increasingly important. Only funds from private sources can increase and finance the necessary investments in the conservation of biodiversity.

A positive impetus for this comes from the private sector, in which “corporate (social) responsibility” is becoming increasingly strategically anchored in order to systematically manage non-financial risks and new business opportunities in the long term. The consideration of social and, above all, ecological aspects no longer serves only to protect against reputational damage (known as “green washing”), but also secures companies’ natural resources in the long term. It is now clear that half of the world’s gross domestic product is heavily dependent on nature; losses of the same thus jeopardise medium- to long-term business models all over the world. In addition, this type of commitment opens up the opportunity for companies to position themselves as a valuable actor in the structure of society and to serve the growing transparency requirements of stakeholders through broad communication channels. Another positive aspect can be derived from the fact that more and more foundations and philanthropists are committed to environmental and biodiversity issues. Civil society’s involvement has also increased noticeably here. One thing is for sure: the efforts made thus far must be multiplied and synergies used as cleverly as possible.

KfW Development Bank’s contribution

In addition to using federal budget funds (via grants or loans), KfW can also use market funds for what are known as promotional loans and interest rate reductions that significantly contribute to effects on biodiversity. In emerging economies in particular, “traditional” budget funding is increasingly being supplemented by funds raised on the financial market. This means that market funds for promoting biodiversity projects can gain in importance, even if nature conservation remains dependent on public grants, as it is usually not directly profitable. Other instruments for tapping into and leveraging private funds are structured funds and conservation trust funds, which are active in nature conservation. Public funds create a risk buffer for private funds and thus attract private capital in the first place or attract more of it. In any case, state and non-state actors together can make a significantly greater contribution to nature conservation than each on their own.

Conclusion

Public awareness of biodiversity is only slowly catching up. It is just as significant as climate change and inextricably linked to it, but the general public is only gradually beginning to recognise its value. In fact, it is a dual crisis, where global warming and biodiversity loss reinforce and intensify each other. Accordingly, both crises can only be solved together. This also applies in times of multiple conflicts and challenges at many other levels. Playing short-term goals against long-term ones will not produce viable solutions.

Now the greater issue is how to cleverly balance the pressure on land created by climate protection, agriculture and the preservation of biodiversity. Climate and agriculture have recognised the problem, although it has not yet been eliminated. As far as biodiversity is concerned, this is not yet the case – despite the high-profile biodiversity conference in Montreal. For this reason, in addition to continuous state funds, more funds from private sources are also needed, which must be systematically tapped into. We must not bite the hand that feeds us. This is why a commitment to biodiversity is currently more important than ever. This is why KfW remains committed to the topic.

A colossal financial gap

State sources will not be able to cover the need for funding in the area of biodiversity on their own. That is why cooperation with the private sector is becoming increasingly important.

Financial Cooperation volumes (sinking & endowment funds) of independent Conservation Trust Funds

With EUR 1,035.6 million we currently support 16 Conservation Trusts Funds globally. They are engaged in 263 protected areas with a surface of roughly 772,000 km². This is comparable about 2.1 times the size of Germany.

