

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

**Submission to the UNFCCC
Standing Committee on Finance**

Topic: Financing Nature-based Solutions

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1. Introduction to GIZ

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has over 50 years of experience in a wide variety of areas, including economic development and employment, energy and the environment, agriculture and food security, water and urban development, as well as peace and security. The diverse expertise of our federal enterprise is in demand around the globe, with and on behalf of the German Government, European Union institutions, the United Nations and governments of other countries all benefiting from our services. The German Federal Government is our main commissioning party, who we support in achieving its objectives in the field of international cooperation for sustainable development.

GIZ welcomes the invitation from the Standing Committee on Finance to submit its views on financing nature-based solutions. GIZ makes this submission based on its experience of working with ministries, regulatory authorities and/or national financial institutions in developing countries and emerging economies on building the conditions for the promotion of Nature-based Solutions (NbS) that benefit both people and planet. The submission responds to the call for proposals by the Standing Committee on Finance relating to the organization of its next Forum on “Finance for Nature-based Solutions”, and specifically responds to the call for NbS-related papers and case studies that could inform the Forum.

There is increased awareness among scientists and practitioners that nature and nature-based solutions can and should play a key role in raising global climate action in order to achieve the Paris Agreement’s global temperature goal and building climate-resilient societies¹. The Zero draft of the Post-2020 Global Biodiversity Framework refers to the potential of NbS to contribute to climate change mitigation and adaptation efforts². Simultaneously, NbS address challenges such as biodiversity loss, ecosystem restoration, food security or local economic development. Investments in Nature-based Solutions will bring us closer to reaching the Sustainable Development Goals and have the potential to create well-being around the globe. Although the concept is new, the ingredients are well-known: NbS bring together ecosystem-based approaches widely known such as ecosystem-based adaptation, protected areas management or ecosystem restoration, with social and economic dimensions.³

Yet, when it comes to international, domestic or private finance for Nature-based Solutions, we are still at the beginning. Today, NbS only receive a small share of international climate finance⁴, although they are part of more than two-thirds of countries’ Nationally Determined Contributions (NDCs)⁵, and play a vital component in developing countries’ adaptation strategies. Research suggests that NbS could further the global mitigation task⁶, yet calculations about its exact contribution remain an object of discussion. Financing NbS can reduce the financial burden of the effects of climate change, and contribute to poverty alleviation, job creation and livelihood resilience.

GIZ has supported more than 120 partner countries over the last 50 years in applying ecosystem-based approaches. Various knowledge products, especially on ecosystem-based approaches for adaptation and disaster risk reduction, REDD+, sustainable forest management, sustainable agriculture, forest landscape restoration, green infrastructure, integrated coastal zone management provide a solid basis to upscale NbS action and finance. The present submission will display a selection of projects and approaches.

¹ <https://wedocs.unep.org/bitstream/handle/20.500.11822/29705/190825NBSManifesto.pdf?sequence=1&isAllowed=y>

² <https://www.cbd.int/doc/c/da8c/9e95/9e9db02aaf68c018c758ff14/wq2020-02-03-en.pdf>

³ <https://www.iucn.org/theme/nature-based-solutions/our-work>

⁴ Rodriguez, J.C., Richerzhagen, C. (2019). Input Paper 2: Biodiversity in climate change finance: Complementarities, obstacles and challenges

⁵ <https://www.nbspolicyplatform.org/adaptation-planning/adaptation-action-types/nature-based-actions/>

⁶ <https://www.unglobalcompact.org/take-action/events/climate-action-summit-2019/nature-based-solutions>

2. GIZ's understanding of financing Nature-based Solutions

Technical assistance (TA) plays a vital role in creating the enabling conditions for financing nature-based Solutions, therefore creating co-benefits for climate change mitigation, adaption and biodiversity conservation as well as ecosystem restoration. In the following we explain GIZ's understanding of nature-based solutions and provide an overview of our technical support to partner countries when it comes to designing financing instruments to nature-based solutions.

2.1. Conceptual overview: Nature-based Solutions

GIZ follows the definition developed by the International Union for Conservation of Nature (IUCN), where Nature-based Solutions represent a broad, but definable, range of actions

to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.⁷

This encompasses specific actions related to e.g. oceans, forests, grasslands, drylands, agricultural lands, freshwater, peatlands, cities, coastal and marine wetlands and mangroves.

Nature-based Solutions can be understood as an umbrella concept that covers a whole range of natural ecosystem related approaches that can be classified into:

- (i) ecosystem restoration approaches (e.g. ecological restoration and forest landscape restoration).
- (ii) issue specific ecosystem-related approaches (e.g. ecosystem-based adaptation, ecosystem-based mitigation, and ecosystem-based disaster risk reduction);
- (iii) infrastructure-related approaches (e.g. natural infrastructure and green infrastructure approaches).
- (iv) ecosystem based management approaches (e.g. integrated coastal zone management and integrated water resources management); and (v) ecosystem protection approaches (e.g. area-based conservation approaches including protected area management).

In GIZ's understanding, the following exemplary approaches are therefore **not** considered NbS (this does not represent an exhaustive list): pure reduction of nature-polluting practices without actively promoting biological diversity; monocultures in agriculture, forestry and in urban green space planning; ex-situ genetic resources; reforestation of – for the location – unsuitable species or of natural forest-free biodiverse biomes or conversion of natural forest to plantations; bioenergy with carbon capture and storage (BECCS); introduction of exotic / potentially invasive species; genetic engineering of agricultural crops, trees or algae in order to use them to produce raw materials / fuels or to store more CO₂; technology-based approaches such as ocean fertilization.

The recently launched IUCN Global Standard for Nature-based Solutions provides a helpful framework to ensure the effective and equitable implementation of nature-based solutions and maximise their potential to help address climate change, biodiversity loss and other societal challenges on a global scale.

According to the World Economic Forum, 50% of the global GDP depends on nature. Nature represents an essential component of the response to climate change, alongside deep emission reduction measures in sectors such as energy, transport, agriculture or

⁷ IUCN, 2016: <https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions>

infrastructure/buildings. NbS are considered to have great potential to contribute to climate mitigation action needed by 2030 while at the same time co-benefitting conservation, sustainable management and restoration of nature. Yet, when looking at their mitigation potential, Nature-based Solutions should not be considered a silver bullet. Massive afforestation or reforestation projects come with land-use and biodiversity considerations and need to consider the effective participation, knowledge and needs of indigenous peoples and local communities. In order to limit the temperature increase to 1.5°C above pre-industrial levels, as agreed in the Paris Agreement, carbon dioxide removal will be necessary, yet challenges regarding NbS such as potential leakage effects, governance structures, permanence of carbon capture and transparency need to be addressed.

NbS are considered cost-effective, and readily available, and alongside climate mitigation and adaptation, deliver multiple benefits for health, biodiversity, development, livelihoods etc. The concept of NbS offers the opportunity to generate a balanced funding for biodiversity conservation as well as for climate mitigation and adaptation.

2.2. Role of technical cooperation in financing solutions

As a technical assistance provider, and on behalf of the German government, we support our partner countries in building the institutional structures, co-creating the enabling framework and designing the financial instruments necessary to mobilise international and national, public and private resources for nature-based solutions. National planning instruments and development agendas, as well as national policy instruments such as climate change strategies, NDCs / LTS, NAPs and/or national biodiversity strategies, provide the framework for our support. Our political counterparts are national sectoral ministries, local/regional governments or supranational organisations.

In close coordination with our national counterparts, we strengthen national financial institutions in partner countries and emerging economies, such as commercial banks, national/regional development banks, microfinance institutions or insurance companies, in their capacities to identify the risks related to a changing climate, in developing more climate and biodiversity friendly financial products, as well as in seizing the potential opportunities of nature-based solutions. We support our partner institutions with knowledge products and tools to design and implement suitable financial instruments and services, ranging from agroforestry loans to green bonds and climate risk insurance products.

We support national ministries and regulatory authorities in our partner countries in creating an enabling institutional and regulatory framework that incentivises public and private investments (blended finance) in climate-friendly activities as well as Nature-based Solutions. According to national priorities, we provide advisory services concerning the channelling of domestic funds into NbS - for example, through dedicated budget lines, public investment guidelines, national environmental/climate funds or the promotion of innovative mechanisms such as payments for ecosystem services, which also include private actors as well as civil-society representatives. Furthermore, we assist our partners in their “readiness” to access international climate and environmental funds and in building NbS project pipelines.

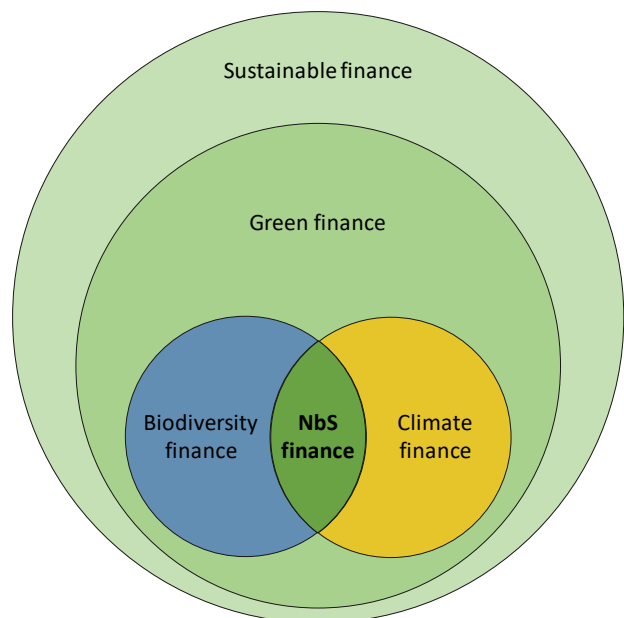
Based on national priorities and agendas, we support partner governments in designing environmentally and climate-friendly financial policies, for example through green financial reforms, carbon pricing mechanisms/systems, and the integration of environmental-economic accounting into political decision-making. In addition, we support them in designing and implementing NDC and NAP financing plans.

Through incubator & accelerator programs, we assist micro, small and medium-sized enterprises in our partner countries focussing on NbS in developing and expanding their businesses and in getting “ready” for receiving (commercial) financing. We support partner governments in developing strategies for engaging the private sector and mobilising private sector resources for NbS projects.

When it comes to the international climate finance architecture, we work together with and/or implement projects commissioned by large international climate and environment funds and initiatives such as the Green Climate Fund (GCF), NAMA Facility, BMU International Climate Initiative (IKI), Global Environment Facility (GEF), and the Global Energy Efficiency and Renewable Energy Fund (GEEREF).

2.3. Nature-based Solutions finance: a triple win

While biodiversity finance aims at providing and fostering financing mechanisms to ensure the conservation and sustainable use of our ecosystems, climate finance focusses on supporting adaptation and mitigation measures. Under the concept of NbS, climate and biodiversity efforts can be pursued in a coherent manner, creating an opportunity to secure synergies and co-benefits: Biodiversity and ecosystems play an important role in strengthening the global response to climate change, while delivering multiple benefits.



Yet, despite growing evidence that natural habitats provide major economic benefits in the form of avoided losses from climate change-related disasters, NbS are extremely undercapitalized, constituting a major barrier to the implementation and monitoring of NbS across the globe⁸.

Looking at currently available data, global biodiversity finance is estimated at USD 78 - 91 billion per year (2015-2017 average). According to OECD 2020 this estimate comprises:

- Public domestic expenditure: USD 67.8 billion per year
- International public expenditure: USD 3.9 - 9.3 billion per year
- Private expenditure on biodiversity: USD 6.6 - 13.6 billion per year.

Meanwhile, governments spend approximately USD 500 billion per year in support that is potentially harmful to biodiversity i.e. five to six times more than total spending for biodiversity. The total volume of finance flows that are harmful to biodiversity (i.e. encompassing all public and private expenditure) is likely to be many times larger.⁹

Current global climate finance has reached a peak in 2017 (USD 612 billion) and is estimated at USD 546 in 2018, because of a slowdown in economic growth, decreases in renewable

⁸ Seddon, N. et.al. (2019): Understanding the value and limits of nature-based solutions to climate change and other global challenges, <https://royalsocietypublishing.org/doi/10.1098/rstb.2019.0120#d3e1461>

⁹ OECD (2020). A Comprehensive Overview of Global Biodiversity Finance. Final report, April 2020: <https://www.oecd.org/environment/resources/biodiversity/report-a-comprehensive-overview-of-global-biodiversity-finance.pdf>

costs, resulting in decreased investments in public low-carbon transport and private renewable energy investments. Public climate finance (mainly domestic, bilateral, and multilateral development finance institutions (DFIs) still represents 44% of the annual commitments (USD 253 Billion in 2017/2018).

The SCF provides an overview of climate finance channels in its 2018 *Summary and Recommendations on the 2018 Biennial Assessment and Overview of Climate Finance Flows*:

	Annual Average USD Billion	Area of Support				Financial Instrument		
		Adaptation	Mitigation	REDD-plus	Cross-cutting	Grants	Concessional loans	Other
Multilateral Climate Finance	1.9	25%	53%	5%	17%	51%	44%	5%
Bilateral Climate Finance	31.7	29%	50%	-	21%	47%	52%	<1%
MDB Climate Finance	24.4	21%	79%	-	-	9%	74%	17%

Note: All values based on approvals and commitments; MDB: Multilateral Development Banks
 Source: Summary and recommendations by the Standing Committee on Finance on the 2018 Biennial Assessment and Overview of Climate Finance flows, [Link](#)

Private finance, which reached USD 326 billion on average annually in 2017/2018, continues to account for most of the climate finance, at around 56%. Private finance is mainly directed towards emission reduction efforts: 85% of this amount went to renewable energies, 14% to sustainable mobility and less than 1% to other sectors. Especially, the mobilization of private funds for adaptation continues to be a great challenge, as the business case for adaptation projects is much more complicated. Nevertheless, these can be an important source of funding for NbS. Great synergies in climate and biodiversity financing can be observed. It must be ensured that the integration of biodiversity conservation in climate finance does not lead to a decline in biodiversity and climate resources.¹⁰

Financing nature-based solutions is a triple win: it offers potential opportunities for synergies between the global biodiversity and climate agendas as well as the 2030 Agenda for Sustainable Development. Both the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform On Biodiversity and Ecosystem Services (IPBES) point out that it is imperative to ensure resources benefit both environment and climate with a specific effort to minimize the trade-offs needed between the two: while efforts in this direction are ongoing, for instance via REDD+ and the Green Climate Fund, there is no doubt that much more needs to be done to reinforce the mutual benefits of investment in biodiversity and ecosystems and investments in climate change adaptation and mitigation.

¹⁰ <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/>

3. Examples of projects and approaches in the area of finance for Nature-based Solutions

GIZ combines expertise in “green” sectors such as biodiversity, climate change adaptation and mitigation with longstanding experience working with a broad range of stakeholders, from Ministries to financial institutions and the private sector, advising on a diverse set of financial instruments.

Below we present a couple of examples of our work, commissioned by the German government (German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the German Federal Ministry for Economic Cooperation and Development (BMZ)), that we implement jointly with partner countries and partner organizations.

Title	Forest landscape restoration in Central America and the Dominican Republic and implementation of the Green Development Fund/REDD+ Landscape
Partner institutions	SG-SICA; Secretariat General of the Central American Integration System
Countries	El Salvador, Costa Rica, Guatemala, Dominican Republic, Belize, Honduras, Nicaragua, Panama
Commissioned by	BMU
Duration	2017 - 2022
Key challenges, intervention and outcome	<p>Among the world’s tropical regions, Central America is the most severely affected by the consequences of climate change. Deforestation and soil degradation are the result of non-adapted agricultural use. Monocultures additionally increase susceptibility to the consequences of climate change. Forest areas are increasingly fragmented. They are no longer able to perform their important functions for water balance, soil conservation and biodiversity. Many governments are therefore striving to restore forest landscapes to ensure important ecosystem services while strengthening the resilience of ecosystems and the population that depends on them. Central America has taken on a pioneering role for the Bonn Challenge, an international initiative for the restoration of forest and tree-rich landscapes (FLR) in the Central American and Caribbean region. Eight million hectares of forest are to be restored in the region. National strategies and mechanisms for implementation and financing have emerged in all eight member states of the Central American Commission for Environment and Development. The project supports six countries in establishing, enhancing and utilizing implementation and financing mechanisms for the restoration of forest landscapes.</p> <p>National strategies, instruments and regulations are being introduced, anchored in legislation and implemented. Indigenous groups, the representative bodies of such groups and women are systematically involved.</p> <p>The European Union's Green Development Fund integrated into the programme provides project funds for the national financing mechanisms. This enables municipalities and local land users to implement pilot projects based on land usage and management plans. To supplement this, the project raises funds from additional public and private investments.</p>
Further Resources	Link

Title	Development of sustainable financing systems for marine protected areas in Caribbean Small Island Developing States (SIDS)
Partner institutions	<i>Caribbean Community, CARICOM; Caribbean Public Health Agency, CARPHA</i>
Countries	Eastern Caribbean Small Island Development States (SIDS); focal countries: Dominica, Grenada/Carriacou, Saint Lucia, St. Vincent and the Grenadines
Commissioned by	BMZ
Duration	2021 - 2023
Key challenges, intervention and outcome	<p>The authorities and organisations responsible for the sustainable governance of marine protected areas of small island and coastal states in the Caribbean do not have sustainable financing systems to fulfil this task. The effective management of marine protected areas, i.e. implementation, monitoring and control of the protective functions and exploitation measures, requires sound financial structures and effective financing mechanisms. This is the only way to ensure long-term sources of income and thus sustainable (self-) financing. Although capacity development measures have strengthened the political dialogue, there is still a lack of strong and long-term secure financing structures and mechanisms for marine protected areas in the Caribbean.</p> <p>A major reason for the notorious underfunding of marine protected areas is the lack of administrative, financial and controlling capacities of the management boards. In addition, those responsible are not familiar with the mechanisms for the availability and acquisition of alternative sources of finance. At the regional level of CARICOM, there is a lack of political interest and a lack of will to implement, both of which are necessary for the responsible actors in the member countries to develop and implement tangible solutions for financing marine protected areas.</p> <p>The project aims at developing non-discriminatory charging of fees for the use of marine protected areas, improved access to financing national conservation trusts for the management boards of marine protected areas and an improvement of the regional framework for financing marine protected areas. The project aims at improving the Caribbean SIDS' resilience to climate change by focussing on a climate-resilient biodiversity conservation as well as protecting important ecosystem services. Additionally, the project supports access to biodiversity finance /funds, specifically the "Caribbean Biodiversity Fund", implemented by German development bank KfW and supported by both BMZ and BMU.</p>

Title	Private sector investment in conservation of dry forests and mangrove restoration
Partner institutions	Local communities (Jicaral, Nandayure, Lepanto), Costa Rican Ministry of Environment and Energy (MINAE), Costa Rican National System of Conservation Areas (SINAC), Costa Rica
Countries	Costa Rica
Commissioned by	BMU
Duration	2010 - 2015
Key challenges, intervention and outcome	<p>Coastal floods, climate hazards, mangrove degradation, lack of access to long-term funding and lack of alternative income opportunities are key challenges in Costa Rica. To meet these, a privately financed system of payments for ecosystem services was introduced, where companies buy conservation credits and the revenue generated is managed by an NGO that invests the funds in sustainable development activities.</p> <p>After having identified an international standard (Global Conservation Standard (GCS)), and the assessment of the forest areas suitable for the sale of conservation credit units (CCU), the responsible NGO FUNDECODES, and other brokers, started to promote CCUs to investors. Contractual agreements could be reached with German enterprises RISTIC GmbH and ALNATURA. FUNDECODES, the CCU selling organization ASEPALECO and Costa Rica's SINAC are responsible for the implementation of the restoration and conservation project and contractually agreed to 10-year objectives. FUNDECODES is reporting annually to the CCU buying company RISTIC GmbH. The whole process is monitored annually by the GCS.</p> <p>Until now, funds generated by the sale of CCUs amount to US\$ 100.000 (another US\$ 40.000 are in negotiation with international and national enterprises). Funds are invested in the restoration of 20 ha of mangrove, the conservation of the private Karen Mogensen Forest Reserve and the implementation of a small-scale honey production project. After 3 years of tailor made technical and financial GIZ support to the whole process, nowadays FUNDECODES has achieved full ownership and responsibility to manage the process by itself.</p> <p>Lessons learnt: The identification and implementation of a financial mechanism ensures effective management and requires joint planning between the main stakeholders involved. Planning and management must have up-to-date information on the different options and lessons learned at the national and international levels. The participation of the main actors in each phase is important since they are the ones which will implement the standard for conservation of natural resources.</p>
Further resources	https://panorama.solutions/en/solutions/financial-mechanism-for-coastal-forest-restoration

Title	People´s Survival Fund in the Philippines in the framework of the Mainstreaming Ecosystem-based Adaptation global project and the Supporting the Philippines´ National and International Climate Policies project
Partner institutions	Philippines Climate Change Commission
Country	Philippines
Commissioned by	BMU
Duration	2015-2019
Key challenges, intervention and outcome	<p>One of the most frequently mentioned barriers to the implementation of an (ecosystem-based) adaptation project at local government level is a lack of funding. The Philippines provides a financial solution with a national climate change fund: the objective of the People´s Survival Fund (PSF) is to fund new climate change adaptation programmes and projects of the local government and community organizations and/or strengthen existing adaptation initiatives. The PSF is intended for adaptation activities that include water resources management, land management, agriculture and fisheries, and health, and serves as guarantee for risk insurance needs for farmers, agricultural workers and other stakeholders. This also opens a window of opportunity to include EbA activities.</p> <p>The PSF can obtain at least 1 billion Philippine Pesos – approximately EUR 16.5 million – every year from the national budget and can be supplemented from external contributions such as counterpart local government units, the private sector, and individuals who support adaptation initiatives. The PSF is managed by a board under the leadership and guidance of the Department of Finance, with the Climate Change Commission as one of the member agencies. The success in appropriating the PSF is dependent on the ability of the national government, through the Board of the PSF, to balance among fund accessibility and adhere to fiduciary standards. Though the fund is readily available, there are still remaining challenges: There are currently no projects under implementation due to a lack of proposals.</p> <p>Lessons learned: While the need for investment in adaptation measures cannot be emphasized enough in the Philippine context, local governments often lack the resources and information to comply with PSF criteria. The Climate Change Commission is working on ways to meet these challenges through proactive information dissemination to facilitate local governments´ understanding of the nature of, processes and requirements to access the fund. The Commission is also involved in training institutional resource persons at the subnational level to assist local governments in preparing the proposals, mostly from state colleges and universities. The Philippine EbA Core Group, supported by the BMUB-IKI Mainstreaming Ecosystem-based Adaptation global project and the Supporting the Philippines´ National and International Climate Policies project, both being implemented by GIZ, helped mobilize an additional EUR 120,000 from the Department of Environment and Natural Resources for generating project ideas and concrete proposals on EbA. 44 EbA project ideas were generated.</p>
Further resources	https://www.giz.de/en/worldwide/18251.html%20 https://climate.gov.ph/our-programs/climate-finance/peoples-survival-fund-psf

Title	Engaging the private sector for ecosystem-based adaptation finance in Cartagena, Colombia, via use of dedicated taxes, subsidies and fees
Partner institutions	Ministry of Environment and Sustainable Development of Colombia, Marine and Coastal Research Institute (INVEMAR), Mayor of Cartagena de Indias, Environmental Public Establishment (EPA) Cartagena, INVEST in Cartagena, Botanical Gardens of Cartagena, Social Foundation
Countries	Colombia
Commissioned by	BMU
Duration	2015 - 2018
Key challenges, intervention and outcome	<p>Cartagena as financial & economic centre of Colombia is heavily exposed to climate hazards; inland wetlands, forests and mangroves have been degraded due to unsustainable land use and land conversion. Coastal communities, urban and rural infrastructure, but also private sector activities (especially tourism) are facing risks for their economic and social wellbeing.</p> <p>The project supported pilot projects for the restoration of mangroves in particularly vulnerable areas, a broad-based financing strategy together with national and regional actors including Cartagena's Water Fund and urban silviculture initiatives jointly with private sector, where event footprint compensations are funding the planting of urban trees.</p> <p>The project established a finance mechanism to support the continuation and expansion of EbA measures already in place and developed a methodology for the participatory design of financial instruments that are readily available for distribution and use. A financial instrument with two sources of revenue was proposed: A compensation for hardening and sealing green areas, and a specific fee for conferences and events that take place in the city. In the long run, the EbA measures are to be refinanced through the city's own fee collection scheme for ecosystem protection</p> <p>Any generated contributions directly feed into an endowment fund that is separate from the city's revenue stream. The municipality oversees collecting the levies. Oversight of the fund will be secured by external auditors. Moreover, an administrative body will structure the distribution of technical implementation, suppliers of goods and services, as well as operators of the measures</p> <p>Lessons Learnt: Securing a finance stream for sustaining EbA is a challenge often experienced by donor-supported projects. The experience in Cartagena exemplifies how a donor-supported project can create an incentive structure within an urban setting for leveraging private finance sources. The project team effectively communicated the value and benefits of contributing financial resources into ecosystem services. This helps support municipalities and national planning departments to mainstream EbA in their strategies.</p>
Further resources	<ul style="list-style-type: none"> • Link, EbA Solution on PANORAMA • See example 1 of EbA finance report • Plan 4C

Title	Implementation of the Lao PDR Emission Reductions Programme through improved governance and sustainable forest landscape management
Partner institutions	Government of Lao PDR (represented by Ministry of Agriculture and Forests (MAF) and Ministry of Natural Resources and Environment (MoNRE))
Countries	Lao People's Democratic Republic
Commissioned by	BMZ, Green Climate Fund (GCF), Asian Development Bank, Lao PDR Ministry of Agriculture and Forests, International Fund for Agricultural Development, Japan International Cooperation Agency, Private sector
Duration	2020 - 2024
Key challenges, intervention and outcome	<p>In recent years, Laos has progressed substantially towards REDD+ readiness. The government has introduced far reaching policies and reforms, including ambitious targets in their Nationally Determined Contributions (NDC) such as 70 per cent forest cover, a timber export ban and a new Forest Law. Laos is now strategically well-placed for Phase 2 of REDD+ (implementation) in order to reduce forest-sector emissions and to achieve further changes.</p> <p>The project co-financed by the Green Climate Fund (GCF), the Asian Development Bank (ADB), the Lao PDR's Ministry of Agriculture and Forests, the International Fund for Agriculture and Development (IFAD), the Japan International Cooperation Agency (JICA) and private sector partners, is embedded in a wider programme that consists of three projects. At the core of the project are performance-based payments to participating communities and institutions to incentivize and fund sustainable land-use practices that yield the highest emission reductions. Overall, this project will deliver three major outputs to the implementation of REDD+ in the Lao PDR, including an enabling environment for REDD+ implementation, market solutions for agricultural drivers of deforestation, climate change mitigation action through forestry.</p> <p>The REDD+ approach provides incentives for developing countries to reduce their emissions from forested lands and to invest in low-carbon paths to sustainable development. Laos has embraced REDD+ to address its principal source of GHG emissions.</p> <p>Proposed outcomes of the project (started 2020):</p> <ul style="list-style-type: none"> • Mitigation goal of 5.6 million tCO₂eq during 4-year implementation period. It benefits 355,800 people (120,000 directly) in 3 provinces of rural northern Laos by promoting sustainable management of forests, landscapes and agricultural resources. • Mobilization of Euro 50.0 Million of co-financing and will, during its 4-year implementation period, unlock REDD+ results-based payments of Euro 23 million from the FCPF Carbon Fund. • The project will provide significant socio-economic and gender-positive co-benefits in disadvantaged rural areas.

Title of initiative	Resource mobilisation for effective implementation of the updated biodiversity strategy in Namibia
Partner institutions	Ministry of Environment and Tourism
Country	Namibia
Commissioned by	BMU
Duration	2014 - 2018
Key challenges, intervention and outcome	<p>Namibia's nature offers high potential for the country's socioeconomic development. Unique land- and seascapes, rich wildlife and abundant mineral resources attract both tourists and investors. The sectors based on natural resources – mining, marine fisheries, tourism and agriculture – form the basis of the Namibian economy. In addition, 70% of the Namibian population depends directly on natural resources for their livelihoods – income, food, pastures, medicinal plants, animal products, fuel and shelter. Yet, according to a review of Namibia's first National Biodiversity Strategy and Action Plan, parts of the targets could not be achieved fully because of a lack of financial resources. It was concluded that a successful implementation would require a much greater mobilization of resources from other ministries and the private sector. Much of the public and private sectors did not consider the values nature provides in their daily decisions. To change this, the business case of biodiversity needed to be demonstrated. The project's methodological approach was based on The Economics of Ecosystems and Biodiversity Initiative (TEEB) and recommendations and standards from the United Nations Statistical Commission. The project cooperated closely with the UNDP Biodiversity Finance Initiative (BIOFIN).</p> <p>The project activities focused on natural capital accounting (using the World Bank's Wealth Accounting and the Valuation of Ecosystem Services (WAVES), including the strengthening of relevant data bases, the mobilization of additional financial resources based on the previous analysis of expenditures and finance needs as well as on accompanying capacity building.</p> <p>Lessons learned: Namibia's efforts, which came together in a „Biodiversity Expenditure Review“, are internationally recognized and served as a basis for the update of the BIOFIN-Workbook. Financing instruments from the Review were swiftly confirmed politically and are now being implemented (for example a fee on plastic bags). Involving the private sector has been a challenge but could be overcome by using a concrete methodological approach, the „Natural Capital Protocol“, that proved useful for private sector actors.</p>
Further resources	https://www.giz.de/en/worldwide/32010.html

Title	Wetlands Management for Biodiversity and Climate Protection
Partner institutions	Ministry of Environment, Forest and Climate Change (MoEFCC)
Country	India
Commissioned by	BMU
Duration	2018 - 2022
Key challenges, intervention and outcome	<p>There are over 750,000 wetlands in India which are spread over 152,600 square kilometers. Distributed across ten bio-geographic zones; from the Trans-Himalayas to the Indian Islands, these wetlands exhibit an enormous diversity and support a variety of ecosystem services like freshwater provision, food, fiber and fuels, groundwater recharge and purification, pollution abatement, flood mitigation, erosion control and carbon sequestration. Yet, many wetlands are threatened by reclamation and degradation through drainage and landfill, pollution, hydrological alteration, over-exploitation, and climate change resulting in loss of biodiversity and disruption in ecosystem benefits to the society. The project's objective is to strengthen the institutional framework and capacities for an ecosystem-based integrated management of wetlands of international importance (Ramsar sites) in India. The desired long-term effect of the project is to restore and improve biodiversity and economic benefits of wetlands in India, and to offer at the same time nature-based solutions for adaptation to climate change.</p> <p>With the support of the project, institutional structures will be established in the selected Ramsar areas and the capacities of the authorities at the state level will be strengthened. The capacity of these institutions for integrated wetland management will be strengthened through training and other capacity building measures. Together with these wetland management institutions, initial analyzes of biodiversity, ecosystem services and climate vulnerability will be carried out. The current main threats to biodiversity in the wetlands are taken into account. The results of the analyses are used to create new management plans for the Ramsar areas or to revise existing ones. The integrated management plans are confirmed by the respective state governments, which in turn is the basis for the allocation of public resources and for management decisions to preserve the wetlands. A Ramsar region information system enables control and reporting on the implementation of the management plans, the effects, measures, functions of the ecosystems and the effectiveness of the management structures. The monitoring results and reports are used by the regulatory authorities for adaptive wetland management, especially with regard to the risks posed by climate change.</p>
Further resources	www.indo-germanbiodiversity.com

Title	Financing Mechanisms for Low-Carbon Development in Peru (FinanCC), within the framework of the Climate Finance Readiness program
Partner institutions	Peruvian Agriculture Bank Agrobanco (among other partners)
Country	Peru
Commissioned by	BMZ, with co-financing from USAID
Duration	2015-2018
Key challenges, intervention and outcome	<p>The project supported Agrobanco in expanding its “green” portfolio by developing a new loan product for the promotion of agroforestry systems (mostly with coffee as main crop). Agroforestry systems are known to combine both mitigation effects (carbon sinks) and adaptation effects (due to enhanced soil quality and water absorption capacity). In addition, the beneficial impacts for farmers translates into higher/ more stable productivity and thus reduced default rates for the bank. In cooperation with the World Agroforestry Centre (ICRAF), GIZ developed a capacity building program to support Agrobanco in training its loan officers and affiliated agricultural advisors in concepts of climate change, climate-smart agriculture and agroforestry.</p> <p>Lessons learned: The core challenge of landscape finance lies in the high number of small-scale projects and their bankability. It is crucial that banks provide specific financial products for specific user groups and land-use practices, for example agroforestry. Agrobanco’s prior experience in financing smallholder agriculture helped in developing financial products to meet this challenge. Agrobanco’s presence on the ground (i.e. the ability to reach actors in remote rural areas) was also instrumental in this context. Nonetheless, credit schemes for complex endeavours as agroforestry systems (mixing agricultural and forest revenues) need further improvement over time. Agrobanco’s story presents a government’s effort to advance smallholder farmers from the poorest regions. Despite the challenges that still lie ahead, Peru holds great potential for landscape finance, especially for forest and landscape restoration.</p>
Further resources	https://www.giz.de/en/downloads/giz2016-en-Flyer_FinanCC.pdf https://www.giz.de/en/worldwide/41746.html

4. Lessons learned and recommendations

- Through NbS, synergies between resources being mobilized for adaptation and mitigation measures as well as biodiversity conservation efforts can be exploited, hence increasing the cost-efficiency of projects and avoiding expenditures that are harmful for biodiversity. This makes NbS an attractive option for international providers of funding earmarked for climate or biodiversity projects.
- Rather than the total amounts made available for NbS, it is the capacity for building an enabling environment, the stability of funding flows and quality of financial planning that ensures impactful results. Therefore, financial resource mobilisation for NbS – both at domestic level, from international sources and from the private sector – needs to go hand in hand with efforts to slow the drivers of (conservation) costs, to initiate reforms of the fiscal system (e.g. elimination of subsidies that are harmful to ecosystems and biodiversity) and to improve efficient resource mobilisation as well as spending capacity at national and local level
- GIZ takes a holistic approach towards financing solutions for NbS that integrates relevant aspects of creating a supportive economic and policy environment, governance and capacity building. Working with a multilevel and multisector approach (sector ministries, finance ministries, local and regional governments as well as national development banks or other financial institutions and the private sector) has proven successful.
- Innovative financing mechanisms for NbS can deliver multiple benefits, but only if their design is carefully fitted to context. Constraints to the financial sustainability of effective conservation of ecosystems and biodiversity are highly diverse and need to be better understood. GIZ assists developing country partners in tailoring financial solutions to their specific socio-economic and institutional setting.
- Public financing mechanisms, such as incentives or budget lines dedicated to NbS, need to be linked to public policies and embedded into the national public budget planning system of countries. This requires a facilitated dialogue between Environmental and Finance/Planning Ministries in order to identify suitable “entry points” and establish a common language.
- National (trust) funds for the promotion of NbS should be structured in a way that ensures their financial sustainability, i.e. going beyond pure philanthropy and state subsidies. An ecosystem-services approach can contribute to the diversification of financing sources, including from the private sector.
- Impact monitoring and measuring of NbS as well as effective communication channels are key both for reporting necessities at Ministry level and additional fundraising efforts. Being able to demonstrate that NbS projects contribute to GHG emission reductions and more resilient ecosystems helps governments to make the case for combined funding or financing instruments, both public and private.
- Yet, further attention is needed looking at three complementary dimensions of NbS finance:
 - There is a need to realign current expenditure plans and avoid future costs due to the loss of biodiversity by mainstreaming NbS into all plans, budgets and actions of public and private sectors (internationally and nationally)
 - Enhancing the efficiency and effectiveness of the uptake and use of funds at all levels
 - Generating additional resources from all sources (public, private and international) is necessary to meet the goals of the Paris Agreement, ensure that our biodiversity and ecosystems remain intact, and contribute to the Agenda 2030 goals.

- Additionally, domestic financial resources become ever more important, and actions needed, include:
 - Mainstreaming NbS into national planning and budgets
 - Improving national capacity for effective and efficient use of resources and enhancing synergies between biodiversity and climate finance

5. GIZ publications and other resources

Finance options and instruments for Ecosystem-based Adaptation (2018) [Available in ENG](#)

Overview of finance options and compilation of ten examples to inspire project developers and practitioners interested in exploring different ways to access resources and engagement models for EbA financing.

EbA Valuation Sourcebook (2017) [Available in ENG](#), [ESP](#)

This sourcebook helps to assist adaptation planners and decision-makers in building awareness, knowledge and capacity for valuing the costs, benefits and impacts of EbA measures in comparison (and combination) with grey measures. It combines information on valuation theory and methods with 40 real-world examples, as well as, practical steps for commissioning, designing and implementing EbA valuation studies.

Ecosystem-based Adaptation and Insurance: Success, Challenges and Opportunities (2019) [Available in ENG](#)

This report provides inspiration to combine climate risk finance and insurance (CRFI) with EbA and more broadly Nature-based Solutions. These can lead to innovations beneficial to both sectors and, most importantly, to improved resilience outcomes for vulnerable people and for nature.

Entry Points for Mainstreaming Ecosystem-Based Adaptation (2018) Available in ENG

A series of four case studies ([South Africa](#), [the Philippines](#), [Peru](#) and [Mexico](#)) which summarizes promising policy entry points and governance structures for EbA mainstreaming at policy and practitioner's level.

Discussion brief: Enhancing the financial sustainability of biodiversity conservation- Conclusions from a review of experience in German development cooperation (2016) Available in ENG

5-Dimensions of Mainstreaming – A Reflection Framework for Practitioners (2016) Available in ENG

A hands-on, easy-to-use assessment tool for biodiversity mainstreaming

Sustainable financing for biodiversity conservation – a review of experiences in German development cooperation (2017) Available in ENG

A synthesis report on experiences of German development cooperation working towards improved biodiversity finance in eight countries: Viet Nam, Namibia, Tanzania, Cameroon, Madagascar, Mauritania, Ecuador and Peru.

Sourcebook on sustainable financing for biodiversity, ecosystems and protected areas in the Western Balkans (2020) Available in ENG

n insight into financial mechanisms, which have been demonstrated as the most effective or useful in practice, and which appear to hold the greatest potential and opportunity to be used to strengthen conservation and sustainable development in the Western Balkans, in addition to the standard public budget channels. However, public budget support needs to be enhanced and supplemented.

How to finance sustainable landscape management - experiences from Agrobanco's green bank project (2019) [Available in ENG](#), ESP

This publication describes the experiences and lessons learned of a Peruvian agriculture bank in expanding its portfolio into forest and landscape finance, in the framework of a corporate initiative of turning the institution into Peru's first green bank.

Training Courses

EbA Mainstreaming

EbA mainstreaming requires building of new technical capacities, knowledge of governance processes and communication skills. Training course modules guide through the various stages of EbA implementation and mainstreaming. As of now, more than 280 participants joined 15 EbA trainings in countries like Germany, Peru, Mexico, Colombia, Jordan, the Philippines, Italy and Thailand. They cover the following topics:

- [Mainstreaming EbA to Climate Change into Development Planning – from understanding risks to implementation.](#)
- [Valuing the benefits, costs & impacts of EbA](#)

Biodiversity Finance Training Course

Securing the financial resources required to conserve biodiversity continues to pose a major challenge although a great deal of time and effort are expended on developing conservation policies, strategies and plans, these often never get implemented, due to a lack of funds. The training course on “strategic approaches and practical tools for the sustainable financing of biodiversity and protected areas” seeks to equip participants with the knowledge, tools and understanding to prepare and implement biodiversity financing solutions, and to use the results effectively to strengthen on-the-ground conservation and development planning, policy and practice – at international, national or local levels, and in support of specific goals, sectors and stakeholder groups. It is organised around three modules which together deal with both the strategic thinking and the practical steps required to diagnose, respond to and deliver sustainable financing solutions. The course has been piloted in Myanmar and Southeast Europe in 2019.