

# **Report on the identification of funding options for the implementation of the Central Asian Mammals Initiative**

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The study “REPORT ON THE IDENTIFICATION OF FUNDING OPTIONS FOR THE IMPLEMENTATION OF THE CENTRAL ASIAN MAMMALS INITIATIVE” was prepared for the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) by adelphi. This work was funded in the framework of the cooperation between the CMS Secretariat and the International Academy for Nature Conservation of the German Federal Agency for Nature Conservation by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection. The views expressed herein are those of the authors and do not necessarily reflect official opinions of the involved institutions.

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## Acronyms

<b>APs</b>	Action Plans
<b>BCA</b>	Biodiversity Credit Alliance
<b>CAMI</b>	Central Asian Mammals Initiative
<b>CBD</b>	Convention on Biological Diversity
<b>CCERs</b>	China Certified Emission Reductions
<b>CMS</b>	Convention on the Conservation of Migratory Species of Wild Animals
<b>COP</b>	Conference of the Parties
<b>CSR</b>	Corporate Social Responsibility
<b>DFC</b>	Development Finance Corporation
<b>DFIs</b>	Development Finance Institutions
<b>DFNS</b>	Debt for Nature Swap
<b>ESG</b>	Environmental, Social and Governance
<b>ESRD</b>	European Sustainability Reporting Standards
<b>ETS</b>	Emissions Trading System
<b>EU CSRD</b>	EU Corporate Sustainability Reporting Directive
<b>FARC</b>	Fuerzas Armadas Revolucionarias de Colombia (Revolutionary Armed Forces of Colombia)
<b>FIs</b>	Financial institutions
<b>FONAFIFO</b>	Fondo Nacional de Financiamiento Forestal (National Forest Financing Fund)
<b>GBF</b>	Global Biodiversity Framework
<b>GHG</b>	Greenhouse Gases
<b>GEF</b>	Global Environment Facility
<b>IAPB</b>	International Advisory Panel for Biodiversity Credits
<b>IBRD</b>	International Bank for Reconstruction and Development
<b>IDB</b>	Inter-American Development Bank
<b>IFC</b>	International Finance Corporation
<b>IUCN</b>	International Union for Conservation of Nature
<b>KPI</b>	Key Performance Indicators
<b>LCs</b>	Local communities
<b>LDCs</b>	Least Developed Countries
<b>MOUs</b>	Memorandum of Understandings
<b>MDBs</b>	Multilateral Development Banks
<b>MRV</b>	Measured, Reported, and Verified
<b>NbS</b>	Nature-based solutions

<b>NDC</b>	Nationally Determined Contributions
<b>NGOs</b>	Non-Governmental Organisations
<b>ODA</b>	Official Development Assistance
<b>PES</b>	Payment for Ecosystem Services
<b>PoW</b>	Programme of Work
<b>PPPs</b>	Public-private Partnerships
<b>PRI</b>	Political Risk Insurance
<b>REDD+</b>	Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation of forest carbon stocks.
<b>SDGs</b>	Sustainable Development Goals
<b>SMEs</b>	Small and medium-sized enterprises
<b>TA</b>	Technical Assistance
<b>TNC</b>	The Nature Conservancy
<b>TNFD</b>	Taskforce on Nature-related Financial Disclosures
<b>UNDP</b>	United Nations Development Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>USD</b>	United States Dollar
<b>WWF</b>	World Wide Fund for Nature

# Executive Summary

## Purpose and introduction

This report evaluates and identifies financing instruments that might be suitable for implementing the Programme of Work (PoW) of the Central Asian Mammals Initiative (CAMI). This report features an introduction of CAMI and its PoW of 2021-2026 (section 1 of this report), followed by a short overview on the status quo on biodiversity finance world-wide and current barriers for private investments in biodiversity (section 2), the needs regarding financing instruments for biodiversity finance from the perspective of experts working within the CAMI region (section 3), a detailed summary of common instruments that can be utilised to finance biodiversity and conservation, including best-practice cases (section 4). Based on this, the report provides targeted suggestions for the stakeholders on suitable finance mechanisms to support the implementation of the CAMI PoW (section 5).

## Key findings

The assessment reveals that conservation activities in CAMI countries are significantly underfunded, with urgent financing needs for on-the-ground conservation measures, research, communication and policy advisory work. Current funding primarily comes from grants of international donors, NGO contributions, and government allocations, with minimal involvement from private sector. At the same time, there is a growing recognition among international biodiversity financiers (such as Multilateral Development Banks or Development Financial Institutions) that utilizing only public funds to reverse biodiversity loss is insufficient, and the involvement of private investors will play a crucial role to close the funding gap for biodiversity and nature conservation.

The complexity of conservation, which involves national governments, nature conservation organisations and financiers requires the application of innovative financial instruments that consider this complexity and the needs of the involved actors. It is crucial to bring together the needs of all involved actors. As conservation work on the ground is different in every country, for this report interviews were conducted with several experts working in different Range States. The interviews identify the most urgent needs of conservation organisations which can serve as supporting information for governments for the implementation of the CAMI PoW and the design of supporting financing instruments. The respondents of the interviews highlighted secure long-term financing for conservation on the ground, research or communication as priorities. Based on interview results, ideally funding should be based on self-sustaining market-based instruments and provide flexible and unrestricted funds to allow for adaptive management of conservation projects and better alignment with the dynamic nature of conservation projects.

Looking at innovative financing mechanisms that have been implemented in other regions, mostly Africa or Latin America, there are instruments that match the needs of governments, private investors and nature conservation organisations in CAMI Range States. These include green bonds or debt-for-nature swaps in combination with regional instruments like payments for ecosystem services, ecotourism or carbon markets. However, such instruments are not widely used in Central Asia yet and the interviewed experts highlighted that they also have limited experience with more innovative finance instruments.

The needs of private investors concentrate on large scale or scalable investment opportunities with proper risk management and standardised impact measurement. Additionally, private investors are looking for investments that can support mitigation / adaptation of climate risks or biodiversity loss and compliance with regulatory requirements. Hence, to attract private investors a financing concept should utilise standardised or well-known instruments (e.g. bonds, trust funds or others) which can offer standardised impact monitoring and reporting. At the same time the instrument should allow for a diversification of the investment, meaning that the funds should not go to one or similar projects only but to different project types. To address this properly, an instrument like a

bond or trust fund can be utilised, since its funds can be distributed to various types of biodiversity or nature projects. Similarly important, private investors are attracted by return on investments which can be provided by market-based instruments such as payments for ecosystem services, ecotourism or carbon markets but also by blending such projects together with other green projects such as renewable energy projects (e.g. in a bond or trust fund).

The report identifies three potential financing mechanism options with varying levels of complexity and impact. First, an NGO-centred mechanism, involving local conservation instruments such as payment for ecosystem services (PES), ecotourism, or carbon markets, implemented with limited government or private investor involvement and accordingly with a smaller financial impact. In the first solution the financial flows are solely managed by the conservation organisations. Second, a government-supported mechanism without debt financing, involving the same conservation instruments as the first option but at national level and including national government funding. In this solution the financial flows are managed through a dedicated national conservation trust fund. Third, a government-supported mechanism with debt financing, involving national conservation schemes and incorporating private investors through a sovereign green bond or debt-for-nature swap to fund the national conservation schemes.

## **Recommendations**

The report recommends establishing one umbrella instrument such as green bonds or debt-for-nature swap which is suitable for private investors due to its existing market standards and can be structured to fund a variety of CAMI PoW activities. This umbrella instrument can, in turn support the implementation of further national market-based instruments, such as payment for ecosystem services, ecotourism or carbon markets as they fit the national context. Market-based mechanisms such as PES schemes, certified ecotourism, and carbon markets can provide sustainable long-term financing to governments or implementing conservation organisations. To ensure a broad and diversified range of funding income streams, governments and NGOs can aim at applying more than one scheme to support their conservation activities.

As seen also from the existing examples on conservation finance there is no one-size-fits-all solution. Hence, country-specific approaches are essential for sustainable conservation financing. In this context governments play a vital role in the identification, development and enabling of suitable financing concepts for countries' biodiversity and conservation targets. In particular, since most financial instruments can be more scalable and powerful at a nationwide level with support from governments, an enabling policy environment or national strategies and targets on biodiversity. To identify the most suitable financing solution for a country, country-specific evaluations through feasibility studies in cooperation between governments, conservation organisations, local communities, and financial actors are essential and most promising to establish a sustainable and well-functioning financing solution.

# 1 Background

## 1.1 Central Asian Mammals Initiative

Central Asia's fragile ecosystems are of global importance for many endangered migratory mammals which rely on the vast steppe, desert and mountain ecosystems for their long-distance movements, which, in turn, ensure their survival. Facing harsh environmental conditions with extreme weather conditions of the region, species such as the Saiga Antelope, the Mongolian and Goitered Gazelles, Asiatic Wild Ass or Wild Camel depend on moving freely over long distances, including across international borders, to escape harsh weather and find enough forage. The large distances covered by these species make landscape-level strategies and transboundary cooperation essential to their conservation.

The Central Asian Mammals Initiative (CAMI) was established and its associated Programme of Work (POW) adopted by the Eleventh Meeting of the Conference of the Parties (COP11) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) in Quito, Ecuador (November 2014). COP13 in Gandhinagar, India (February 2020) revised and updated the Resolution and POW (Resolution 11.24 (Rev.COP13)). The Initiative, covering 15 CMS-listed species occurring in 14 Range States, aims to enhance the conservation of migratory mammals in Central Asia, by providing a common strategic framework for cooperation and conservation measures that coherently address major threats to the species and their habitats.

## 1.2 Programme of Work for 2021-2026 and its implementation

The current Programme of Work of CAMI for 2021-2026 (PoW) was developed at the Second Range States Meeting, which took place in Ulaanbaatar, Mongolia on 25-28 September 2019, and was further adopted by CMS Parties along with Resolution 11.24 (Rev. COP13). It is implemented by the government authorities of the Range States, research institutes, non-governmental organizations (NGOs), intergovernmental agencies and other stakeholders in cooperation with the CMS Secretariat throughout the six-year period.

Its overarching goal is to "improve the conservation of migratory large mammals and their habitats in the Central Asian region by strengthening coordination and cross-border cooperation." It includes cross-cutting activities to address urgent and major threats faced by all or most of the species as well as activities focused on single species (including existing Memoranda of Understanding (MOUs)/Action Plans (APs) and those in development) and large landscapes.

This study contributes specifically to section 31. Funding of the PoW and its subsequent actions that, *inter alia*, call to continue and expand existing initiatives and funding programmes (31.1), conduct an "inventory" of donors and funding programmes and identify a "champion" for CAMI (31.5), consider organising innovative funding sources to mobilise funding for CAMI (31.8), establish a trust fund for CAMI including with funding from the private sector (31.11).

## 1.3 Methodology of this report

Mostly all the sections in this report are based on desktop research and literature review. The literature review included resources from grey literature, scientific literature and publicly available databases of featured projects. Only section 2 of this report is based on interviews with experts who work on the implementation of the CAMI PoW in different range states. Details on the conducted interviews are described in section 2 of this report.

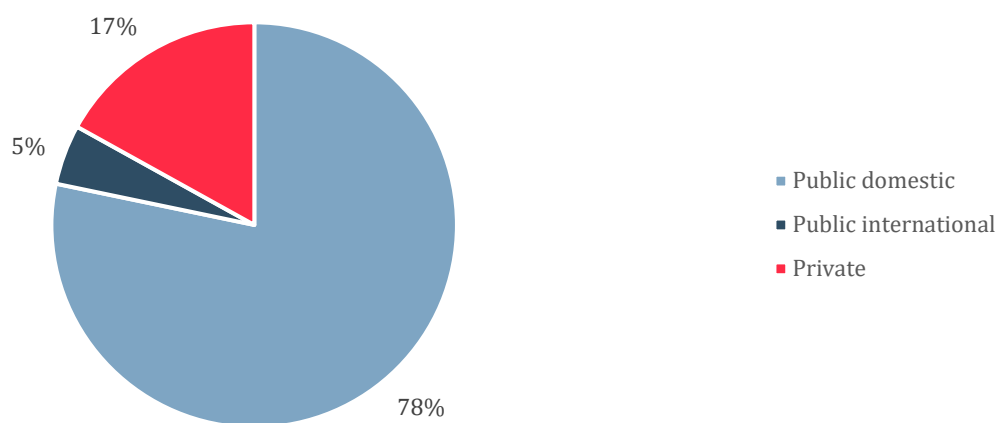
## 2 Current landscape of nature-positive and biodiversity financing

### 2.1 Investors in nature-positive and biodiversity projects

The global financial flow into biodiversity has grown from USD 166 billion in 2021 to USD 208.3 billion in 2023. There has been a slight increase in both public and private funding for biodiversity and nature-related projects, with new financial mechanisms and investment opportunities emerging to support their implementation. A significant share of this increase (USD 9.3 billion) stems from new investments into projects that are concentrated in Canada, China, Japan, Turkey and the USA.<sup>1</sup>

Investments by the public sector made up 83% of the financial flow (USD 173 billion), including international public investments, while the private sector contributed 17% (USD 35 billion). Public financial flows include public domestic spending and public international sources (overseas development assistance), with USD 163 billion and USD 10 billion respectively<sup>2</sup>.

Estimate of biodiversity finance flow (% , 2023)



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For private financial flows, the bulk of investment went to biodiversity offsets/credits and carbon markets (USD 13.2 billion) and sustainable supply chains (USD 8.6 billion), but overall private sector investment in biodiversity and nature-related projects remained low despite commitments from numerous private businesses to achieve net-zero emissions or become deforestation-free<sup>3</sup>.

<sup>1</sup> BloombergNEF, Biodiversity Finance Factbook: COP16 Edition.

<sup>2</sup> BloombergNEF, Biodiversity Finance Factbook: COP16 Edition

<sup>3</sup> Van Raalte, D. and Ranger, N. (2023). Financing Nature-Based Solutions for Adaptation at Scale: Learning from Specialised Investment Managers and Nature Funds. Global Center on Adaptation and Environmental Change Institute, University of Oxford.

## 2.2 Financing needs for biodiversity and nature conservation

To reach the investment targets of the Montreal-Kunming Global Biodiversity Framework (GBF) for biodiversity of USD 200 billion annually by 2030, and to reform or reduce harmful subsidies of USD 500 billion, a total investment gap of between USD 598 billion and USD 824 billion per year must be closed. However, there is a visible trend from donors and public and private financial institutions to increase financial flows into biodiversity.

Most of the financial flows are being provided by public sources and philanthropic donors<sup>4</sup>. In addition to these public funding sources, private investors are needed to engage more in closing the financial gap for biodiversity. It might be especially relevant as the recent estimations count that a global economic transition towards nature-positivity can create business opportunities worth USD 10.1 trillion and 395 million jobs by 2030<sup>5</sup>. Given this, this section of the report shall be focused on the key reasons why private investors are holding back from investing substantially.

## 2.3 Push and pull factors for private investors

Though public investments are crucial, private investments hold great financial potential and are needed to increase the current financial flows to secure measures that adequately address climate change and biodiversity loss challenges as well as human well-being needs<sup>6</sup>. In this report, private investors are defined as large corporations, small and medium-sized enterprises (SMEs), banks, asset managers, insurance companies, impact investors and high net worth individuals. The motivation for private investors to finance biodiversity and nature-related projects is mainly driven by the risks climate change and biodiversity loss pose on businesses and economies and the rising regulatory pressure on corporations and financial institutions to disclose environmental impacts of their operations and being held accountable for such impacts.

### Avoiding negative impacts on businesses

Generally speaking, nature underpins the global economy by providing essential ecosystem services, such as food, energy and raw materials. For corporations and SMEs, it will be crucial to invest into nature and biodiversity to mitigate negative impacts on assets, prevent increases in insurance premiums, and avoid negative impacts on the company's market value. A decline or disruption of ecosystem services can jeopardise supply chains and business operations and thus the production and distribution of goods and services globally<sup>7</sup>.

In order to minimise and mitigate nature-related risks to their portfolios and operations, financial institutions need to (i) assess and disclose nature- and biodiversity-related impacts and price them, (ii) integrate and reflect potential risk in their portfolios and decision-making processes and (iii) increase their financing of nature- and biodiversity-positive investments.

### Regulatory compliance and corporate social responsibility

Regulatory pressure to comply with mandatory reporting and disclosure regulations (e.g. EU Corporate Sustainability Reporting Directive (CSRD)/ European Sustainability Reporting Directive (ESRD), EU Taxonomy, or other sustainability reporting) can help to steer corporates and financial institutions to assess and disclose nature- and biodiversity-related impacts and to increase financial flows into nature- and biodiversity-positive investments.

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<sup>4</sup> Dashboard 2024 on Biodiversity Finance Trends: [2024 Trends — Biodiversity Finance Trends](#); BIOFIN: Results-Based Budgeting for Biodiversity (2024), page 1.

<sup>5</sup> World Economic Forum; New Nature Economy Report II – The Future Of Nature And Business (2020), page 9.

<sup>6</sup> WWF, South Pole (2022): Common success factors for bankable nature-based solutions; BloombergNEF, Biodiversity Finance Factbook: COP16 Edition.

<sup>7</sup> KPMG (2023): The Investment Case for Nature; PWC, WWF (2020): Nature is Too Big Too Fail; World Bank (2024): Blueprints for Private Investments in Ecosystem Restoration.

As of today, such mandatory regulations are still limited but are expected to become more comprehensive in upcoming years<sup>8</sup>.

In addition to that, reputational gains from compliance with nature- and biodiversity-related frameworks (such as Taskforce on Nature-related Financial Disclosures (TNFD), Sustainable Development Goals (SDGs) or the Paris Agreement)<sup>9</sup> or net-zero or other sustainability commitments are motivating private investors to increasingly focus on biodiversity and nature-related solutions<sup>10</sup>.

### **New market and business opportunities**

Ultimately, it is estimated that activities in biodiversity and ecosystem conservation and restoration can result in great market opportunities and economic value by providing direct economic outputs and jobs but also indirectly by supporting jobs and economic output of related sectors<sup>11</sup>.

## **2.4 General investment barriers for private investors**

Financial flows into biodiversity and nature-based solutions (NbS) did not reach the needed volume due to several barriers present in this rather new investment field. Thus, this section provides an overview of the most prominent obstacles that are perceived by private investors. These range from perceived high financial risks, low or risky returns on investment and a scarcity of attractive investment opportunities to a lack of standardised data, regulatory challenges, and insufficient capacity and knowledge on biodiversity and nature-related investments. Understanding and addressing these barriers is crucial for unlocking the potential of private investment in biodiversity, paving the way for more robust and sustainable financial commitments to conservation and restoration efforts.

### **Perceived high risks**

Investors might be concerned about the financial risks associated with biodiversity investments, including the fear that such investments might perform poorly financially<sup>12</sup>. The uncertain demand for sustainable products, the technical complexity of conservation and restoration projects, and fiscal incentives for projects that hinder/destroy biodiversity are contributing to the risk perception of private investors<sup>13</sup>. The complexity and perceived high transaction costs of biodiversity projects deter investors, who often require more straightforward investment opportunities based on market-proven concepts. In addition, the project-related risks—especially in regions with evolving political landscapes like Central Asia—are heightened by economic volatility and insufficient infrastructure for green investment<sup>14</sup>.

### **Scarcity of investment-grade opportunities**

There is a scarcity of investment opportunities in biodiversity and nature-related projects that can attract mainstream investors by providing the desired financial returns in a relatively short period of time. Many potential investments tend to be perceived as too small, financial returns are unstable or unclear and payback periods are too long in relation to the financial returns, all of which can limit their appeal to larger institutional investors<sup>15</sup>.

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<sup>8</sup> UNEP FI (2024): Accountability for Nature;

OECD (2023): Assessing biodiversity-related financial risk; Credit Suisse (2021): Unearthing investor action on biodiversity.

<sup>9</sup> PBAF – Biodiversity Foodprint Standard; TNFD recommendations and guidances; SBTN – target setting guidance for companies on biodiversity; ISSB standards on General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1) and Climate-related Disclosures (IFRS S2)

<sup>10</sup> The Rockefeller Foundation (2024). Mobilizing Finance, Empowering Communities, and Scaling Nature’s Solutions

<sup>11</sup> World Bank (2024): Blueprints for Private Investments in Ecosystem Restoration.

<sup>12</sup> Credit Suisse (2021): Unearthing investor action on biodiversity; KPMG (2023): The Investment Case for Nature.

<sup>13</sup> World Bank (2024): Blueprints for Private Investments in Ecosystem Restoration.

<sup>14</sup> KPMG (2023): The Investment Case for Nature; WWF, South Pole (2022): Common success factors for bankable nature-based solutions.

<sup>15</sup> Credit Suisse (2021): Unearthing investor action on biodiversity; KPMG (2023): The Investment Case for Nature; WWF, South Pole (2022): Common success factors for bankable nature-based solutions.

## **Lack of standardised data and metrics**

Investors might face significant challenges investing in biodiversity nature-related projects due to the lack of standardised data and metrics and respective tools for assessing the project and the cost-benefit data and risks. This lack of standardised data and tools hinders the ability to set biodiversity-linked targets and develop investment strategies focused on biodiversity conservation and restoration. Additionally, there are no clear, universally accepted indicators for biodiversity and nature-related projects yet, which makes it difficult for investors to track and compare performance on non-financial metrics related to biodiversity<sup>16</sup>.

## **Regulatory and policy barriers**

Going forward, regulations and policies will be one of the biggest drivers for mainstreaming biodiversity investments. There is a perceived lack of regulatory support to create a secure basis for biodiversity finance models and provide incentives to drive investments in biodiversity (for example, national schemes for ecotourism and carbon markets—for more examples see section 4 of this report). Some investors believe that without the right policy environment (e.g., national carbon markets or other supporting schemes), nature and biodiversity investments will not become a major source of returns<sup>17</sup>.

## **Weak capacity in biodiversity financing**

Many private investors cite weak internal expertise and capacity within their company to assess and manage biodiversity-related investments and business models. This gap in knowledge makes it difficult for them to engage effectively with biodiversity projects while also making it difficult for project developers to engage private investors. Many project developers lack the financial expertise to design an investor-ready biodiversity or nature-related projects that creates financial returns. Enhancing capacities at investors and project developers and building networks for knowledge sharing are crucial steps to overcome these barriers<sup>18</sup>.

## **Missing connections to local communities on investors side**

Investors may be discouraged by the complexity of navigating the intricate relationships between local communities and their environments, as addressing these dynamics requires significant effort and resources (such as fieldwork). For biodiversity and nature-related projects, gaining community buy-in is crucial for their success as they often concern land that is used and inhabited by local communities. To ensure their strong cooperation biodiversity and nature-related projects should create jobs or provide other incentives for the local communities to replace sometimes unsustainable land use practices. However, by doing so investors should be aware of the livelihood and other circumstances of local communities to avoid projects negatively affecting existing inequality and meaningful involvement of the community, particularly in areas with diverse or marginalised populations<sup>19</sup>.

For this purpose, investors need proper connections and a line of communication to local communities which are often missing or are very resource-intensive to establish and to maintain, in particular for international investors who are not based on the project site. Hence, it is crucial for investors to have a local partner in the project with good and trustful connections to local communities. This can also help to mitigate fear of change, low awareness, or perceived threats to livelihoods of the community members to avoid resistance to biodiversity projects by the local communities.<sup>20</sup> Otherwise, the potential for social friction or community backlash can become a major barrier, making investors wary of committing investments to such projects without clear strategies for community integration and support<sup>21</sup>.

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<sup>16</sup> Credit Suisse (2021): Unearthing investor action on biodiversity; WWF, South Pole (2022): Common success factors for bankable nature-based solutions.

<sup>17</sup> Credit Suisse (2021): Unearthing investor action on biodiversity.

<sup>18</sup> KPMG (2023): The Investment Case for Nature; WWF, South Pole (2022): Common success factors for bankable nature-based solutions.

<sup>19</sup> World Bank, 2023. Gender and Inclusion in Nature-Based Solutions.

<sup>20</sup> Ferreira, V., Barreira, A. P., Loures, L., Antunes, D., & Panagopoulos, T. (2020). Stakeholders' Engagement on Nature-Based Solutions: A Systematic Literature Review. *Sustainability*, 12(2), 640.

<sup>21</sup> European Investment Bank (2023): Investing in nature-based solutions State-of-play and way forward for public and private financial measures in Europe

## 3 CAMI PoW financing situation and conditions

### 3.1 Information on the conducted interviews

The aim of the interviews was to get an understanding of the current financing situation, the financial sources and instruments used for the implementation of the CAMI PoW but also of the perceived obstacles in relation to the funding and financing instruments. This information shall serve as basis to identify suitable financing instruments that could be utilised to improve and foster the implementation of the CAMI PoW.

For this report 8 interviews with several experts working either within the CMS or as species experts for the implementation of the CAMI PoW have been conducted. A detailed list of the interviewed experts can be found in Annex 1 of this report. Most of the interviewed experts have been suggested by the CMS, only 1 expert was suggested by an interviewed country expert. The regions in which the country experts worked in at the time of the interviews cover Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and one expert working on the Dugong MOU at CMS Abu Dhabi Office. The interviews were conducted between December 2024 and January 2025.

All the interview partners received a prepared catalogue with 9 guiding questions (Annex 2). The questions were discussed with each interview partner in an online interview and none of the partners returned written feedback to the questions. The questions focused on the financial sources for the implementation of the CAMI PoW, financing gaps, advantages and disadvantages of certain funding sources and instruments, obstacles to obtain funding and preferences on funding sources and financial instruments followed by a desktop analysis presented below.

The following sections will provide only consensus views of the interview partners instead of opinions or views that have been expressed by a single expert only in order to identify and to highlight general tendencies which may be applicable to the CAMI region as a whole.

### 3.2 Status quo of financing and financing gaps

Across the interviewed experts, there is a unanimous agreement that **conservation activities in the CAMI countries are underfunded and urgently require greater funding**. Research, communication, policy advisory work and implementation of conservation measures on the ground were highlighted as specific areas needing greater funding. In particular, activities that are not directly linked to the protection of specific species are often restricted by funding sources but are required to implement holistic conservation concepts, where species are seen as an integrated part of a wider ecosystem across borders, including solutions to monetarise the conservation work and allow commercial use to some extent (e.g. ecotourism, sale of sustainable products or other). Most of the interviewed experts responded that there is a need for long term funding, which could be created by the implementation of self-sustaining concepts such as payment for ecosystem services (PES), ecotourism or by means of financial instruments that are created to support the implementation of the CAMI PoW, such as green bonds or debt-for-nature swaps, where the issuer can define the term of the funding.

**The results of the interviews suggest that the primary sources of funding at present are grants from international, multilateral and private donors, contributions from NGO donors as well as government allocations.** Funding from private companies seems to be limited and largely comes from the oil and gas sectors active in some of the CAMI countries.

Other funding sources that were mentioned included sustainable use of the wildlife, such as ecotourism (in a few cases on local basis), trophy hunting (e.g., in Argali) and commercial hunting (e.g., in Saiga). Other funding is partly provided by the sale of sustainably acquired products such as sea buckthorn and honey, though this type of funding is still underdeveloped and typically only self-supporting rather than being able to provide additional financial resources for conservation work in the respective landscapes.

Most respondents also indicated that they or others in their field/landscape lacked experience with innovative funding mechanisms such as payments for ecosystem services, green bonds, and debt-for-nature-swaps and that such instruments are not widely spread in the CAMI countries or just in their early stages of development. While such new financing mechanisms have succeeded elsewhere in the world, their potential in Central Asia remains largely untapped.

The following sections provide a summary of the perceived challenges but also preferences for funding as reported by the interviewed experts.

### **Reported challenges in utilising governmental budget:**

- Insufficient allocation of governmental financial resources for biodiversity and nature conservation
- Only early-stage development of overall strategies for conservation and funding at national levels
- Complex governmental structures and unclear/changing responsibilities for conservation and governmental funding sources (Ministry of Finance vs. Ministry of Ecology or other regional responsible actors)
- Only early-stage or non-existent overall reporting and tracking of biodiversity targets at national and regional levels
- Understaffing in departments responsible for the management of conservation projects
- Interdependencies between several ministries and lack of authority within single ministries to develop sustainable and self-sustaining conservation practices which can delay decisions on the development of support schemes (e.g. PES or ecotourism on a (sub-) national level)
- Practices like national ecotourism or payments for ecosystem services are, in many countries, only in the development phase and need additional resources for further development

### **Reported challenges in utilising grants:**

- Need for political endorsement to win bigger grants and the related bureaucratic hurdles
- Restricted eligibility for grants, in particular excluding certain countries from funding (e.g., only Least Developed Countries (LDCs) are eligible)
- Minimal flexibility in the use of grants (in particular grants have restrictions to use funds for research which is needed for conservation)
- Weak capacity in local implementing NGOs to effectively utilise, manage and monitor grant funds
- Donor-driven purpose of funding, which often prioritises trending topics or charismatic species over essential conservation needs (e.g., conservation research)

### **Reported challenges in obtaining funding in general:**

- International funding sources are often channelled through United Nations entities, such as United Nations Development Programme (UNDP) or the CMS Secretariat, which adds an additional layer of bureaucracy and makes the process for utilisation of the funds more complex
- Governments of the Range States often do not have sufficient capacity to deal with existing funding offers and financing mechanisms for biodiversity and nature conservation. The existing, limited capacity is used for higher-priority issues than nature conservation

- Private investors lack understanding and knowledge about conservation
- Reluctance of private investors to engage in long-term, low-return conservation projects
- Commercial financial instruments are perceived as not suitable for conservation (hard impact indicators vs. unpredictable conservation results)

**Preferences for financing structures:**

- Preferred recipients of financing appear to be NGOs and local communities, as they are seen by many donors as the most effective implementers of conservation activities.
- There is also a preference for regional projects that can be implemented more rapidly than those requiring extensive government involvement
- Ideal funding mechanisms should provide long-term, flexible and unrestricted funds. Such mechanisms would allow for adaptive management of conservation projects and better alignment with the dynamic nature of conservation projects
- Funding structures should allow for disbursement of funds directly to implementing entities
- Funding should facilitate a greater independence from public funding and foster the development of self-sustaining and sustainable conservation work on the ground
- Funding structures should avoid dependence on government funds and include mechanisms that can be implemented with limited governmental support

## 4 Financing instruments for biodiversity and nature

To bridge the financial gap in conservation efforts and to tap the financial resources of the private sector, a range of financing mechanisms can be employed. There are various financing instruments and mechanisms that have been developed and proven successful in other regions and which local entities and the governments of the Range States can utilise to finance the implementation of the activities in the CAMI PoW. In the following section we will provide an overview of a range of instruments which can be suitable to mobilise financial resources for biodiversity and nature-related projects.

### 4.1.1 Direct investments / enhancing instruments

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**Disclaimer: This section does not provide legal advice on any of the listed instruments. The listed instruments are described in a simplified but comprehensive way to fit the purpose of this report.**

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This sub-chapter on direct investments lists instruments that typically provide relatively short-term support, where the use of proceeds is restricted to very specific activities within a single project. In some cases, however, the instruments are designed for long-term support over several years.

Grants	
Description of instrument	Financial benefits that usually are non-repayable.
Possible beneficiaries	<ul style="list-style-type: none"><li>- Governments of the Range States</li><li>- NGOs implementing the CAMI PoW</li><li>- Scientific institutions</li></ul>
Reporting requirements	Usually, the reporting requirements are stringent but limited compared to other instruments. However, there are different reporting requirements depending on the grant.

<b>Grants</b>	
Transaction costs <sup>22</sup> for set-up of instrument	Medium to high transaction costs for: <ul style="list-style-type: none"> <li>- Grant proposal;</li> <li>- management and reporting.</li> </ul>
Accessibility for CAMI stakeholders	Grants can be accessed easily compared to other instruments via the implementing NGOs or the governments of the Range States. The need to involve third party to access the grant depends on the specific grant offer. In some cases, it is required to involve multilateral development banks (MDBs), development finance institutions (DFIs) or other institutions (e.g. UNDP) to receive and distribute the funds.
Benefits	<ul style="list-style-type: none"> <li>- Financial source without the requirement of repayment;</li> <li>- does not directly require project revenues;</li> <li>- as non-repayable component in financing instruments, grants can reduce financial risks for private investors and hence, can attract or back-up additional private financial flows.</li> </ul>
Constrains	<ul style="list-style-type: none"> <li>- Mostly short-term financing model</li> <li>- No sustainable financial source for local implementing actors or communities</li> </ul>
Best practice	A list of grant facilities relevant in context of this report can be found in Annex 2.
Other information	Mostly, grants are paid out as one-time payment and therefore, compared to some market-based instruments, do on their own not create a long-term financing source. However, there are some grants that are paid in a revolving manner which are more suitable to provide long-term financial sources and to complement the establishment of other financial instruments.

<b>Guarantees and insurances<sup>23</sup></b>	
Description of instrument	Guarantees and insurances are both mechanisms to manage risk, but they operate in slightly different ways. Typically, both instruments accompany other financing instruments to reduce risk and debt

<sup>22</sup> Transaction costs refer to possible internal and external costs for the party establishing a financial instrument, that that occur for and in relation to the set-up and maintenance of the respective financial instrument. The evaluation here is based on expert opinion / experience. The level of transaction costs here is described based on comparison of the costs for the instruments listed in this report.

<sup>23</sup> WWF, South Pole (2022): Common success factors for bankable nature-based solutions.

	<p>financing costs for the borrower. Both instruments only provide monetary flows in case the guaranteed / insured event has occurred. Prominent examples for guarantees or insurances are related to political or climate risk which could impact nature or biodiversity investments.</p> <p><b>A financial guarantee is a promise made by a third party, the guarantor, to assume responsibility for a borrower's debt obligation</b> if the borrower fails to meet its obligations. Guarantees are often used as credit enhancement in lending transactions to provide assurance to the lender.</p> <p>By contrast, insurance is a contractual arrangement in which an individual or entity receives financial protection or reimbursement against losses from the insurance provider in exchange for an insurance premium. Insurances used in recent conservation financing mechanisms were the Political Risk Insurance or Parametric Risk Insurance. Political risk insurance is a type of insurance designed to protect investors from the potential financial losses that can arise due to political events or instability in a country. Parametric risk insurance is a type of insurance that provides coverage based on predefined parameters or triggers (typically objective, measurable events, such as a certain level of rainfall, wind speed, earthquake magnitude, or temperature), rather than the actual loss incurred. This approach is often used for climate or nature risks that are difficult to quantify or where traditional insurance models may not be efficient.</p> <p>Guarantees and insurances can be a good addition to other financial instruments to crowd-in other financial resources and to reduce investors risks for projects with less mature commercial concepts or projects in instable political and other enabling environments.</p>
Possible beneficiaries	<ul style="list-style-type: none"> <li>- Government of the Range States who are obtaining other debt financing;</li> <li>- DFIs / MDBs providing debt financing to implementing NGOs.</li> </ul>
Reporting requirements	Usually, low reporting requirements compared to other instruments. However, depending on the guarantee or insurance agreement, there are different reporting requirements.
Transaction costs for set-up of instrument	<p>Medium high transaction costs for:</p> <ul style="list-style-type: none"> <li>- Arrangement of guarantee or insurance (e.g. legal documentation);</li> <li>- management and reporting;</li> <li>- insurance premium or guarantee fee.</li> </ul>

Accessibility for CAMI stakeholders	Guarantees or insurances can be accessed rather easily (depending on the risk profile of the applicant) compared to other instruments. There is no need to involve other third-party entities to access the instrument.
Benefits	<ul style="list-style-type: none"> <li>- Can reduce financial risks for private investors and crowd-in private capital.</li> </ul>
Constrains	<ul style="list-style-type: none"> <li>- No stand-alone instruments</li> <li>- No sustainable income source for local communities / actors;</li> <li>- Guarantee costs or insurance premium can be quite high if the risk profile of the applicant is too risky.</li> </ul>
Best practice	See Debt for Nature Swap (DFNS) and Green Bond examples where guarantees and insurances are part of the mechanisms.

#### 4.1.2 Market-based instruments

Market-based instruments are referred to services or products sold in markets which are led by supply and demand within a marketplace. Instead of relying solely on government regulations or interventions, market-based solutions encourage businesses and consumers to make choices that lead to desired outcomes.

Payment for ecosystem services (PES) <sup>24</sup>	
Description of instrument	<p>The core mechanism of a PES is that a provider creates ecosystem services which are then bought or incentivised by a buyer which to support the provision of the ecosystem service. PES contracts can be concluded between governmental and private parties or exclusively between private parties.</p> <p>In <b>government administered PES</b> the state usually provides incentives such as subsidies, tax reductions/exemptions or cap-and-trade schemes to ecosystem service providers. Private <b>PES schemes are such that are directly set up between the buyer and the seller</b> (e.g. between private companies, landowners or local communities). The remuneration can be in form of direct payments but also in other forms, such as certifications from the buyer to the provider.</p>

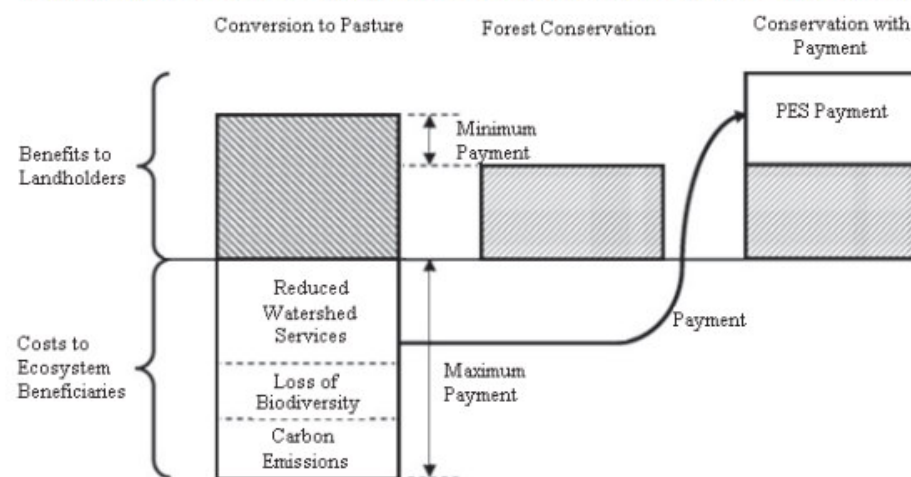
<sup>24</sup>UNEP (2008): Payments for Ecosystem Services: Getting Started, p. 8; R. C. Brears (2022): Financing Nature-Based Solutions, Palgrave Studies in Green Finance, p. 135; Wegner, G.I. (2016): Payments for ecosystem services (PES): a flexible, participatory, and integrated approach for improved conservation and equity outcomes. *Environ Dev Sustain* **18**, 617–644.

## Payment for ecosystem services (PES)<sup>24</sup>

The ecosystem service that is paid for is defined in the PES agreement and can cover various services, such as:

- Watershed protection
- Carbon storage
- Invasive species management
- Control of agricultural pests
- Aesthetic beauty and landscape enrichment
- Generation and renewal of soil and soil fertility.

**Figure 1.1. The PES mechanism: ecosystem beneficiaries pay the landholder supplying the service to compensate for the additional costs of conservation**



Source: Adapted from Engel *et al.*, 2008.

### Possible beneficiaries

As provider of the ecosystem service:

- Local communities supporting the implementation of the CAMI PoW

**Payment for ecosystem services (PES)<sup>24</sup>**

	<ul style="list-style-type: none"> <li>- NGOs implementing the CAMI PoW</li> <li>- Local enterprises</li> </ul>
Reporting requirements	<p>PES contracts should contain reporting requirements for the provider and buyer to monitor, evaluate and to confirm the results of the ecosystem service to obtain payments or incentives. The specific reporting requirements are subject to the individual contract agreement. However, reporting is required according to the payment cycles.</p>
Transaction costs for set-up of instrument	<p>High transaction costs for:</p> <ul style="list-style-type: none"> <li>- Development, piloting and evaluation of the PES scheme;</li> <li>- implementation of the PES scheme;</li> <li>- negotiation and management of the PES contracts;</li> <li>- monitoring and evaluation of the services delivered;</li> <li>- management of the payments.</li> </ul>
Accessibility for CAMI stakeholders	<p>In general, the set-up of a PES contract requires knowledge of such contracts, the local ecosystem and communities on the side of the implementing parties but also on the investors side. For the implementation (either governmental or private) a cooperation with a knowledgeable partner in PES would be important (e.g. Global Environment Facility (GEF)) to benefit from existing knowledge and experience in the implementation of PES for proper planning that takes into account the complexities of PES schemes and needed adjustments depending on the ecosystem it shall be implemented in.</p> <p>The set-up of a governmentally or privately administered PES scheme requires either financial resources from the government or a sufficient number of private buyers / sufficient pricing to cover the payments and provision of the ecosystem services.</p>
Benefits	<ul style="list-style-type: none"> <li>- Can create long-term and sustainable income sources for local communities / actors;</li> <li>- Governmental schemes potentially reach a broad geographical coverage within a country, not only local or regional areas;</li> <li>- Governmental schemes can be designed in an obligatory way which require participation in PES by private actors;</li> <li>- Private schemes do not rely on government administration and could be set-up quicker.</li> </ul>
Constraints	<ul style="list-style-type: none"> <li>- Lack of capacity and knowledge about PES by governments, local communities and private investors;</li> </ul>

## Payment for ecosystem services (PES)<sup>24</sup>

- High up-front costs to design, test, evaluate and implement PES schemes;
- Identification of the beneficiaries of the payments can be difficult, e.g. when land tenure is unclear
- Very specific impact and cost-benefit metrics, depending on the ecosystem hosting the PES;
- Cost-benefit metrics can be hard to measure, and measurements may require costly equipment;
- Private agreements are of voluntary nature, difficulty to convince the buyers to enter a PES scheme and pay for a service that has been "for free" in the past.

## Best practice

### **Governmental PES schemes:**

#### Environmental Services Payment Program (Fondo Nacional de Financiamiento Forestal - FONAFIFO) in Costa Rica (co-funded by GEF)<sup>25</sup>:

- Payments to landowners for activities that foster sustainable environments (such as reforestation, conservation of natural forests, agro forestry etc.)
- Government funding sources: a.o. fuel tax (80 %) and forestry tax
- Other funding sources: World Bank loans, international grants (including GEF) and GEF investments

#### Payment for Hydrological Environmental Services Program in Mexico (co-funded by GEF)<sup>26</sup>:

- Payments to forest owners for the benefits of watershed protection
- Government funding sources: water fees and national government budget
- Other funding sources: World Bank loans, GEF investments

#### Conservation performance payment scheme for Lynx (*Lynx lynx*) and Wolverine (*Gulo gulo*) offspring in Sweden<sup>27</sup>:

- Payments to Sami reindeer herder according to the number of Lynx and Wolverine offspring observed each year as a proxy for the total population
- Completely funded by the Swedish government.
- Government funding sources: national government budget.

<sup>25</sup> GEF (2012): Payment for Ecosystem Services, p. 6.

<sup>26</sup> GEF (2012): Payment for Ecosystem Services, p. 6.

<sup>27</sup> [Results based payments network.eu - Sweden](http://Results based payments network.eu - Sweden)

## Payment for ecosystem services (PES)<sup>24</sup>

### Private PES schemes:

#### Forest conversation project in Germany<sup>28</sup>:

- Producer of refreshment drinks pays forest owners for the provision of high-quality drinking water. The payments go into reforestation and planting of trees in so called "drinking water forests". The project is implemented in cooperation with the German association Trinkwasserwald e.V.

#### Water PES in Chon-Aksuu' Region of Kyrgyz Republic<sup>29</sup>:

- Upstream users of the watershed (farmers, forestry and tourism providers) as sellers are selling water services to the downstream users of the watershed, which are farmers that grow crop and need water for irrigation.
- The PES is set-up by the stakeholders which are organised in specific committees (pasture, forestry and water user committees). The committees entered bilateral contracts for the payments, which are made in form of labour days to the other committees. The tourist fees paid in cash to the forest administration. 10 % of the fees must be dedicated to water protection.

### Forest PES in Central Asia:

- The Asian Forest Cooperation (AFOCO) is supporting the implementation of forest related PES in the member states of the cooperation. However, from the CAMI range states, only Kazakhstan and Kyrgyzstan are members. More information on the PES development of AFOCO can be found here: [\(Training Report\) Payments for Ecosystem Services \(PES\) | AFoCO](#)

## Nature or ecotourism

### Description of instrument

There is no widely accepted and common definition of ecotourism. The International Union for Conservation of Nature (IUCN) defines ecotourism as "environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy, study, and appreciate nature that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic

<sup>28</sup> <https://www.trinkwasserwald.de/home>

<sup>29</sup> [PPT - Pilot PES scheme in the Chon - Aksuu watershed, Kyrgyzstan PowerPoint Presentation - ID:4113621](#)

**Nature or ecotourism**

	<p>involvement by local people". Each region or country can have its own interpretation of ecotourism. Once implemented such nature or ecotourism can generate financing for biodiversity conservation by visitor entrance fees, tourism concessions for accommodation, leasing fees and increased tax income by visiting tourists and their consumer spendings in the country. To develop nature or ecotourism the respective touristic infrastructure, such as transportation connections, housing, food supply, medical services should exist close to the area to be developed.</p> <p>For credibility reasons the tourism scheme should ideally be based on an international or national certification scheme or be offered under the supervision of national wildlife agencies or the stewardship of international conservation organisation (WWF or similar). Crucial elements for the design of tourism schemes are inclusion of local stakeholders, financial sharing of the revenues which also finance measures to protect and respect the nature in the visited areas and mechanisms to create value chains that benefit local communities and NGOs.</p>
<p>Possible beneficiaries:</p>	<p>As provider of the tourism services:</p> <ul style="list-style-type: none"> <li>- NGOs implementing the CAMI PoW</li> <li>- Local communities or enterprises supporting the implementation of the CAMI PoW</li> </ul>
<p>Transaction costs for set-up of instrument</p>	<p>Medium to high transaction costs for:</p> <ul style="list-style-type: none"> <li>- Design, piloting and evaluation of the tourism scheme;</li> <li>- Development of the tourism area and improvement of required infrastructure (housing, transport connection, food supply etc.) to fit the scheme and to attract the target group(s);</li> <li>- Costs for certification;</li> <li>- Negotiation and management of concessions and land rights (if needed);</li> <li>- Monitoring and evaluation of the impact of tourism on the conservation area;</li> <li>- Management of tourism scheme (promotion, maintenance of facilities etc.).</li> </ul>
<p>Reporting requirements</p>	<p>Reporting can be required under certain certification schemes or if concessions are granted from third parties / governments.</p>
<p>Accessibility for CAMI stakeholders</p>	<p>Can be set-up by NGOs / local communities on a regional level or in cooperation with governments or international organisations if a certification shall be acquired.</p>

**Nature or ecotourism**

**Benefits**

- Can create long-term and sustainable income sources for local communities / actors;
- governmental or international certification schemes potentially reach a broad geographical coverage within a country, not only local or regional areas;
- International / national certification can add credibility to the scheme which can be more attracting to investors
- schemes without certification do not rely on government administration and could be set-up quicker.

**Constraints**

- Rather high up-front costs to design, test, evaluate and implement tourism schemes;
- Unclear land tenure can prolong the process to set-up the scheme or make revenue payments more complex;
- Certification may be costly and require specific monitoring/reporting
- Overtourism can impact conservation activities
- May not be viable option where charismatic species are lacking or difficult to see, or where they don't exist in a sufficient variety.

**Best practice**

**Uganda - Mountain gorillas nature tourism<sup>30</sup>**

- Mountain gorillas are home to protected areas which are located in cross-border areas of Uganda, Democratic Republic Kongo and Rwanda; the area was originally inhabited by local communities and used for logging, hunting, gold mining, honey harvesting, pit sawing
- To bring together conservation goals and local communities a participatory ecotourism scheme was applied which offered certain benefits to the communities: new business opportunities like restaurants, accommodation and local tourism products plus the revenues from entrance fees and other concession fees are shared between the Wildlife Authority
- The scheme is not linked to a specific certificate but managed by the governmental wildlife authority which creates credibility towards incoming tourists.

<sup>30</sup> Muresherwa, Gift & Makuzva, Washington & Dube, Cynthia & Amony, Imelda. (2022). The management of mountain gorilla tourism in Uganda: Are the socio-economic benefits realised? Maekawa, Miko & Lanjouw, Annette & Rutagarama, Eugène & Sharp, Douglas. (2013). Mountain gorilla tourism generating wealth and peace in post-conflict Rwanda.

## Nature or ecotourism

- Uganda Government efforts: reforms and regulation that enabled the private sector to develop the tourism market and investment in marketing to attract international tourists (investment in tourism fairs and including tourism development into economic plans);

### **Botswana – grassland ecotourism<sup>31</sup>**

- Grasslands offer a variety of ecotourism activities, such as walking safaris, boating and mokoro poling (a type of canoe), elephant-back and horseback safaris, quad biking, birding safaris, fishing, and general photographic, hunting, archaeological tours and cultural trips
- The Government of Botswana started developing ecotourism by issuing its National Ecotourism Strategy. National ecotourism is managed by the Botswana Tourism Board
- Ecotourism is taking place in protected areas or wildlife management areas which are either owned by the government or the local communities
- A good example for cooperation of private companies and local communities is the community-owned protected area in Okavango. With help of donors the community created a trust fund, the Khwai Development Trust, and partnered with private safari operators and hunters to develop the ecotourism in the area (in particular by building infrastructure like accommodations)
- The revenues from tourism activities, hunting concessions, lease from private partners for land-use go into the trust which then pays concession and lease taxes to the government. The rest is used for conservation activities, the further development of the tourism area but also to support the community (village facilities, health care support or similar).

### **Ecotourism in CAMI range states:**

- Evaluation and examples of schemes are discussed in this report: Potential for Community-based Wildlife Management of CAMI Species. Report to the Federal Agency for Nature Conservation (BfN) and the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) - Potential for Community-based Wildlife Management in Central Asia: [https://www.cms.int/great-bustard/sites/default/files/publication/Study\\_CBWM\\_final\\_for%20posting\\_en\\_complete.pdf](https://www.cms.int/great-bustard/sites/default/files/publication/Study_CBWM_final_for%20posting_en_complete.pdf)

<sup>31</sup> Maude, Glyn & Reading, Richard. (2010). The role of ecotourism in biodiversity and grassland conservation in Botswana

## Carbon markets<sup>32</sup>

### Description of instrument

Nature conservation projects can be financed through carbon offsetting by leveraging the economic value of carbon sequestration and carbon emission avoidance. This usually works in the following steps:

- **Carbon credits generation:** Conservation projects generate carbon credits by biologically capturing carbon dioxide from the atmosphere. This can be achieved by conservation or increasing existing carbon pools or by generating new ones. Off-set credits are mainly generated from forestry, agriculture, re-wetting and water-related activities. Aside from conservation activities, they can also be generated by renewable energy or energy efficiency projects.
- **Certification and verification:** To ensure credibility, the projects undergo rigorous certification and verification processes by recognised standards and their bodies. This ensures that the carbon credits are legitimate and represent real, measurable, and additional reductions in greenhouse gas emissions. The most common verification schemes include Verra Program, Gold Standard and Plan Vivo.
- **Market trading:** Once verified, carbon credits can be sold on compliance or voluntary carbon markets. Compliance markets are national / international trading systems linked to international / national obligatory carbon emission targets (e.g. under the Paris Agreement). Voluntary markets function the same but in parallel to the compliance market. Voluntary credits are mostly used by companies to demonstrate Corporate Social Responsibility (CSR) or to establish a green corporate image.
- **Financial benefits for conservation:** The revenue generated from selling carbon credits provides a financial incentive for the conservation projects, enabling them to fund their activities and expand their impact. It can also support local communities by providing jobs and enhancing biodiversity, thereby linking economic benefits with environmental conservation.

There are in general two different forms of carbon markets, voluntary markets that sellers and buyers can participate in on voluntary basis and compliance markets, that are linked to policy or regulatory requirements and are mandatory for certain sellers and buyers. Voluntary carbon markets can be set-up

<sup>32</sup> R. C. Brears (2022): Financing Nature-Based Solutions, Palgrave Studies in Green Finance; The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability (2020): Financing Nature: Closing the global biodiversity financing gap; Interreg (2021): Towards a carbon credit & blue credit scheme for peatlands.

**Carbon markets<sup>32</sup>**

	<p>by private organisations but also governments. Compliance markets are set-up by international bodies or national governments.</p> <p>Examples for voluntary markets:</p> <ul style="list-style-type: none"> <li>- South Pole: <a href="https://www.southpole.com/sustainability-solutions/carbon-credits">https://www.southpole.com/sustainability-solutions/carbon-credits</a> (company that provides certifications for climate action projects)</li> <li>- Cercarbono: <a href="https://www.cercarbono.com/">https://www.cercarbono.com/</a> (voluntary carbon certification standard that supports climate change mitigation projects)</li> </ul> <p>Examples for compliance market:</p> <ul style="list-style-type: none"> <li>- UN carbon offset platform: <a href="https://offset.climateneutralnow.org/">https://offset.climateneutralnow.org/</a></li> <li>- Other national schemes such as EU Emissions Trading System (ETS), Mexican ETS, Chinese ETS.</li> </ul>
Possible beneficiaries	Implementing NGOs
Transaction costs for set-up of instrument	<p>Medium high transaction costs for:</p> <ul style="list-style-type: none"> <li>- Project Design and Development, including feasibility studies, baseline assessments, and developing a project design;</li> <li>- Validation and verification by an independent third party to ensure they meet the criteria of the chosen carbon standard. After implementation, projects require regular verification to confirm the actual emission reductions achieved. These processes can be costly, especially if the project is complex or located in a remote area;</li> <li>- Registration and issuance fees for registering a project for a carbon standard and issuing carbon credits;</li> <li>- Ongoing monitoring of the project's emissions, including data collection and analysis, required equipment for that and reporting, which can incur significant costs over the life of the project;</li> <li>- Legal and administrative costs for setting up contracts, ensuring compliance with regulatory requirements.</li> </ul>
Reporting requirements	Monitoring, reporting and verification are the cornerstone for carbon credits. The specific requirements vary for the different carbon credit schemes.

## Carbon markets<sup>32</sup>

### Accessibility for CAMI stakeholders

Implementing NGOs could participate in existing voluntary but also compliance carbon markets. The participation, in particular certification and marketing of the credits require a partnership with a carbon credit standard and carbon credit marketplace. Usually, the participation in a voluntary scheme is easier to access with lower bureaucratic requirements than compliance markets.

To design projects in a way that they can participate in carbon schemes different partners offer technical assistance to support the set-up of carbon credit projects, for example:

- The Nature Conservancy (TNC): [Living Carbon: Stories of Nature's Climate Solutions](#)
- Vahara (focussing on agriculture carbon sequestration): <https://www.varaha.earth/about-us>
- CO<sub>2</sub> bank Asia (so far only projects in SEA): <https://co2bank.asia/>
- South pole: <https://www.southpole.com/sustainability-solutions/carbon-credits>

But also, governments of the range states could set-up their own voluntary or compliance carbon market scheme to collect financial resources for distribution to national conservation efforts. However, the set-up of a national scheme takes much more preparation time, capacity and financial resources than participation in existing schemes (see constrains below).

### Benefits

- Generating carbon credits can be an investor-attracting component of a project's financing plan, since it supports the establishment of a long-term funding mechanism for conservation;
- Voluntary carbon credits are, compared to compliance carbon credits, easier to verify and to register, which can save costs and time for smaller projects.

### Constraints

- Carbon offsets only provide financial sources once the project is implemented and credits sold;
- Sale of carbon credits require regulation on the ownership of the carbon credit (depending on the national regulation it could be tied to land ownership, be a separate right independent from any asset or could be nationalised and owned by the government)
- National carbon credits can only benefit biodiversity / conservation projects if the government channels the off-setting revenues into a dedicated trust fund for national conservation which can then benefit NGOs and local communities.
- Integrity of the carbon standard can be sometimes in doubt, for example in case double counting where credits are counted in different voluntary and compliance schemes or the additionality of the carbon projects themselves (meaning that the project would have been implemented without the carbon credit scheme anyways)

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	<ul style="list-style-type: none"><li>- On national level it requires a good, interlinked framework on regulations to balance and regulate the market demand and supply of carbon credits, the impact of carbon credits and allowances on the affected industries and sufficient market incentives.</li><li>- National schemes require suitable financial resources, know-how, infrastructure and regulatory supporting environment for the implementation of carbon schemes and their governance.</li><li>- Required infrastructure is for example: certification registries, trading platforms, systems for integrity checks on the projects and created credits;</li><li>- Rather lengthy process to establish national schemes (several years);</li><li>- Technical assistance should be obtained from governments that want to set-up national schemes (e.g. <a href="#">NDC partnership-market-readiness</a>) and initial guidance material can be used for an early assessment: <a href="#">World Bank Roadmap for Carbon Markets Infrastructure</a></li></ul>
Best practice	<p><b>Colombia (compliance and voluntary market)<sup>33</sup>:</b></p> <ul style="list-style-type: none"><li>- National carbon tax on fossil fuel emissions, the scheme allows companies to avoid the tax by buying carbon off-sets from projects in Colombia or by obtaining a certification for "carbon neutral company".</li><li>- Revenues from the countries carbon tax flow into the Sustainable Colombia Fund to support sustainable and peace projects in areas that were affected from violent conflict with Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia - FARC).</li><li>- Voluntary carbon market scheme at national level is also in place. The scheme aims to promote organisational carbon neutrality commitments by 2050. In exchange for calculating footprints and establishing targets, the country provides tax reduction incentives based on "levels of effort" to reduce emissions while generating fiscal revenues.</li><li>- Emission Trading System (ETS) is in development phase. For this purpose, Colombia cooperates with the World Bank and used their technical assistance "Partnership for Market Readiness" to evaluate a ETS system design, conduct an impact assessment of an ETS on sector impacts and conduct a design study on the set-up options for a mandatory Greenhouse Gases (GHG) reporting programme.</li></ul>

<sup>33</sup> [Sustainable Colombia Facility - IDB Trust Fund | Openaid](#);  
[Status and Trends of Compliance and voluntary carbon markets in Latin America | International Carbon Action Partnership](#)

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	<p><b>China (compliance and voluntary market)<sup>34</sup>:</b></p> <ul style="list-style-type: none"><li>- National compliance ETS including major emitting sectors (power generation, steel, building materials, non-ferrous metals, petrochemicals, chemicals, paper and civil aviation)</li><li>- Under this scheme companies have defined emissions allowances, if they exceed those, they must buy additional allowances or compensations from the voluntary markets. In turn a surplus of a company's allowances can be sold at the ETS exchange market.</li><li>- Voluntary GHG emissions reduction trading market at (China Certified Emission Reduction scheme) at national level</li><li>- Two schemes operate independently but are interconnected via a mechanism that allows firms to buy China Certified Emission Reductions (CCERs) on the voluntary market to meet their compliance targets under the ETS</li></ul>
<p>Other information</p>	<p>When choosing a carbon standard, one should be careful that the following points are addressed:</p> <ul style="list-style-type: none"><li>- Offsetting has been and is used as an excuse for the buyers of carbon credits for not cutting emissions, allowing environmentally destructive activities to continue under the green veil of nature and biodiversity conservation. Thus, buyers should have a clear carbon reduction strategy;</li><li>- Overall additionality and permanence of the carbon sequestration projects;</li></ul>
<p>Biodiversity credits</p>	<p>Biodiversity credits basically following the same concept as carbon credits. The main difference is that they are quantified conservation efforts instead of carbon savings/sequestrations. In contrast to carbon markets, global biodiversity credit markets are not yet developed, also respective criteria and schemes for the generation and sale of the credit are still in development phase. There are currently few countries which have or are in the process designed their own national biodiversity credit schemes:</p> <ul style="list-style-type: none"><li>- Australia in partnership with the private company South Pole: <a href="#">EcoAustralia™ Credits from South Pole</a></li><li>- Mexico (in development): <a href="#">Mexico   BIOFIN</a></li><li>- UK (similar to biodiversity credits): <a href="#">Biodiversity net gain – GOV.UK</a></li></ul> <p>It remains somewhat unclear who would buy these certificates, under what circumstances and in what form. On the one hand, it is about voluntary purchases of certificates by different actors, for example companies that depend on ecosystems or insurers that want to counteract systemic risks caused by</p>

<sup>34</sup> <https://www.reuters.com/sustainability/whats-chinas-carbon-market-how-does-it-work-2024-09-12/>

## Carbon markets<sup>32</sup>

biodiversity loss. There are contradictory statements, what role compensation payments for damage to biodiversity ('biodiversity offsetting') play on the demand side. Demand could be linked to various legal requirements for voluntary and mandatory offsetting, e.g. also within the framework of the new EU regulations such as the EU CSRD. However, there are major reservations about such markets, which could legitimise damage to biodiversity. In any case, the development of such certificates is still in its infancy and there are many challenges for implementation. To this end, the multi-stakeholder International Advisory Panel for Biodiversity Credits (IAPB) presented a framework at COP 16 of the Convention on Biological Diversity (CBD) (IAPB's Framework for high integrity biodiversity credit markets). The Biodiversity Credit Alliance (BCA) is another initiative to promote these instruments.

As the quantification of biodiversity conservation is much more complex than the verification of carbon emission, some initiatives are working on the development of standards, indicators and monitoring methods for the verification of nature conservation successes (see also 2.3 below). New technologies such as satellite data etc. and AI should also be able to provide support here in order to efficiently obtain the necessary database. Pioneers are Verra with its Nature Framework as an element of its Sustainable Development Verified Impact Standard (SD VISta) and Plan Vivo with its PV Nature Standard. There are parallels and synergies with the various standards for measuring negative impacts and dependencies in relation to biodiversity, such as the new Standard 101 of the Global Reporting Initiative (GRI) or ESRS 4 as part of the European Reporting Standards (ESRS) for CSRD reporting.

Interesting concepts at a conceptual level so far are the 'Mission-oriented approach' of the Institute for Innovation and Public Purpose (IIPP) and the 'Global Public Investment (GPI)' approach.

## REDD+<sup>35</sup>

REDD+ is an international framework that works alike carbon credits on the concept of payments to incentivise emissions reductions. REDD+ thereby incentivise **voluntary efforts in developing countries** to reduce greenhouse gas emissions and enhance carbon removals from forest activities. It was designed under the United Nations Framework Convention on Climate Change (UNFCCC). Countries with large forest areas can participate in the REDD+ framework. Developing countries that meet UNFCCC REDD+ requirements will receive results-based payments for verified emissions reductions. As such, REDD+ creates an incentive for these countries to reduce emissions from forests and invest in low-carbon paths to sustainable development. The requirements to receive the payments are the following:

<sup>35</sup> K. Hamrick, C. Webb, R. Ellis (2021): Nesting REDD+ - Pathways to bridge projects and jurisdictional programs; Streck, Charlotte. (2020). Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance.; [Forest carbon pricing brief - FINAL.pdf](#)

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- A national strategy or action plan;
- An assessed forest reference emission level and/or forest reference level;
- A national forest monitoring system;
- A system for providing information on how the safeguards are being addressed and respected;
- And the results-based actions should also be fully measured, reported and verified (MRV).

The UN-REDD Programme supports developing countries in establishing the technical capacities needed to implement REDD+ and meet UNFCCC requirements for REDD+ result-based payments.

The participation in REDD+ itself is government-led and does not create tradable credits, such as carbon credits. However, it is under discussion if projects under an existing REDD+ scheme in a country could be linked to other voluntary carbon markets as the REDD+ do create emission reductions and the up-front costs for REDD+ projects can often not solely be financed by public sources. To integrate REDD+ projects into other carbon markets there are several issues that need to be overcome by international policy and national laws, namely that current REDD+ standards are not aligned with other existing voluntary carbon markets standards, there may be risks of double-counting of emission reductions after a trade of credits (but this is also an issue with carbon credits in general) or questions on the carbon right (ownership of the credit is unclear). These issues can only be addressed based on the very specific circumstances within a country.

## Green bonds<sup>36</sup>

### Description of instrument

A bond is a debt-financing instrument by which a borrowing party issues promissory notes to investors. By purchasing the bond notes the investors are lending money for a defined time in exchange for defined (fixed or variable) interest payments from the issuer. Usually, the principal investment is repaid in full after the maturity of the bond. In general, the proceeds raised by the bond sales are to be used as defined in the bond documentation. Green bonds are bonds where the proceeds are earmarked or ring-fenced to finance or refinance green projects or project pools.

For green bonds there are several internationally accepted bond standards that help to provide transparency and serve as guidance to set-up a green bond. The standards are Green Bond Principles

<sup>36</sup> EU Business and Biodiversity Platform (2024): Business Models and Investments for Nature; IFC (2020): Green Bond Handbook; R. C. Brears (2022): Financing Nature-Based Solutions, Palgrave Studies in Green Finance; [Explaining green bonds | Climate Bonds Initiative](#); Climate Bond Standards version 4.1; ICMA Green Bond Principles 2021.

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	<p>developed by the International Capital Market Association, the Climate Bonds Standards developed by the Climate Bonds Initiative (this is also aligned with the Green Bond Principles), the EU Green Bond Standard developed by the European Commission or the Nature Bonds Practice Standards developed by TNC.</p>
Possible beneficiaries	<p>As issuer of the bond:</p> <ul style="list-style-type: none"> <li>- Governments of the Range States</li> </ul> <p>As entities receiving the proceeds of the bond from the government:</p> <ul style="list-style-type: none"> <li>- NGOs implementing the CAMI PoW</li> </ul>
Transaction costs for set-up of instrument	<p>High transaction costs for:</p> <ul style="list-style-type: none"> <li>- Planning of the bond set-up (e.g. including the commitment of government);</li> <li>- Planning of the projects that shall be included in the bond;</li> <li>- Marketing and communication material for investors and investor engagement;</li> <li>- Disclosure information (including prospectus, term sheet, offering memorandum, indenture contract, official debt instrument statement, or other legal documentation);</li> <li>- Bond certification according to applied standard;</li> <li>- Evaluation, selection and management of green projects (to be) included in the bond portfolio;</li> <li>- Management of use of proceeds and interest payments to investors;</li> <li>- Financial reporting and reporting on conservation targets;</li> <li>- Other related legal advisory.</li> </ul>
Reporting requirements	<p>On a basic level an annual financial reporting is required, including a list of green projects that benefitted of the investments, a description of the projects and the expected impact. This will require a solid monitoring throughout the reporting year. The scope and focus of the reporting differ depending on the bond standard that has been applied.</p>
Accessibility for CAMI stakeholders	<p>Depending on the jurisdiction covering the bond such transactions require specific legal documentation (such as a prospectus) and can only be underwritten by institutions that hold a banking licence (or equivalents). Therefore, the issuance of a bond requires legal consultation / expertise and the institutional infrastructure. If the bond is issued by governments, initial governmental commitment is needed in an early stage of the bond set up. Given the high preparatory work for the set-up of green</p>

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	<p>bonds it is advisable to cooperate with a knowledgeable partner to set up such bonds (e.g. TNC or WWF).</p> <p>Other required actors:</p> <ul style="list-style-type: none"> <li>- Issuer of the bond</li> <li>- Project advisor for the technical and financial set-up of the bond;</li> <li>- Legal advisor for the legal documentation;</li> <li>- Financial institution as underwriter and/or structuring agent;</li> <li>- External reviewers to certify compliance with bond standard;</li> <li>- Financial institution as credit enhancers: FIs that provide securities to improve the credit rating of the issuer (this can be in form of an insurance or guarantee);</li> <li>- External auditor / third party to verify and report the use of proceeds and compliance with green objectives.</li> </ul>
Benefits	<ul style="list-style-type: none"> <li>- Available bond standards that are familiar to private investors;</li> <li>- Standardised metrics and data that come along with the bond standards;</li> <li>- Can attract large and diverse investor base</li> <li>- If issued by an international financial institution the debt can be used for different projects in different countries (as defined in the bond documentation);</li> <li>- Suitable for long-term project horizons and high capital costs</li> <li>- Green bond premium on the primary market can make them financially attractive for investors;</li> </ul>
Constraints	<ul style="list-style-type: none"> <li>- Requires revenue streams / financial capacity for interest payments;</li> <li>- Requires stock listing + good credit rating of the issuer (possible to improve rating with guarantee of DFIs or MDBs) to attract broad investor target groups;</li> <li>- Costs to manage required third-party involvement (financial underwriter and legal advisors);</li> <li>- Lengthy preparations for the set-up of a complex bond with various actors involved (e.g. Rhino bond, see below)</li> <li>- If issued by governments, funds are dedicated to projects in specific country</li> <li>- If issued by governments, a strong national ESG / sustainability strategy and regulatory framework shall be in place to supports investor's trust in the bond and the confidence that the</li> </ul>

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	proceeds of the bond will be used efficiently for the implementation of biodiversity and nature-related projects
Best practice	<p><b>Wildlife Conservation Bond (“Rhino Bond”)<sup>37</sup></b></p> <ul style="list-style-type: none"><li>- Issuer: International Bank for Reconstruction and Development (IBRD) by World Bank</li><li>- Sustainable development impact bond with a volume of USD 150 million and a tenure of 5 years</li><li>- Use of proceeds: Principal goes to different ring-fenced World Bank sustainable development projects which generate revenue. Of the revenues USD 10 million go to the rhino conservation activities in two protected areas in South Africa, the Addo Elephant National Park and the Great Fish River Nature Reserve.</li><li>- Structuring agent and bookrunner: Credit Suisse and Citibank</li><li>- Repayment logic of the bond: Principal repayment at the end of the maturity date. But no interest payments on the bond notes but an impact-based success payment (based on rhino growth rate) at the maturity end rate.</li><li>- Other information: Repayments of the investor will be paid-out by IBRD and are funded by a performance-based grant by GEF.</li><li>- Set-up took overall ~ 9 years.</li></ul> <p><b>Indonesia sovereign green bond and green sukuk (issued 2018 – matured 2023)<sup>38</sup></b></p> <ul style="list-style-type: none"><li>- Issuer: Perusahaan Penerbit SBSN Indonesia III (state-owned vehicle to issue the bond)</li><li>- Obligor: Republic of Indonesia</li><li>- Green bond and sukuk (aligned with Green Bond and Sukuk Framework of Indonesia) with a volume of USD 1,25 billion and a tenure of 5 years</li><li>- Bond follows Islamic principles as well as Green Bond Principles</li><li>- Use of proceeds: Principal goes to different projects aligned with the categories of the Green Bond Principles, such as green tourism, sustainable agriculture and resilience to climate change.</li></ul>

<sup>37</sup> <https://www.worldbank.org/en/news/press-release/2022/03/23/wildlife-conservation-bond-boosts-south-africa-s-efforts-to-protect-black-rhinos-and-support-local-communities>; <https://www.weforum.org/stories/2022/05/wildlife-conservation-bond-innovative-financing-to-achieve-results-for-rhinos/>

<sup>38</sup> [Indonesia Ministry of Finance Green Sukuk Reporting 2019](#)

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	<p>The different projects are coordinated by different involved ministries of Indonesia's government.</p> <ul style="list-style-type: none"><li>- Structuring lead agents and bookrunner: Abu Dhabi Islamic Bank (ADIB), Citi (B&amp;D), Commerce International Merchant Bankers (CIMB), Dubai Islamic Bank (DIB), Hongkong and Shanghai Banking Corporation (HSBC)</li><li>- Technical assistance support: UNDP for project selection and evaluation in the pre-issuance process, and impact measurement and reporting for post-issuance.</li><li>- Repayment logic of the bond: Intermediate distributions to the investors have been made and the principal was repaid at the end of the maturity date. This has been financed from governmental budget. Since the projects of the bond included state-owned renewable energy facilities or transport projects (railway track constructions or bus line development) the revenues of such projects could have been contributing to the repayments. However, detailed information is not publicly available.</li><li>- Other information: The bond was backed/secured by assets (land, buildings) and project-assets of the Indonesian government. The bond was structured to align with principles of Islamic banking, using specific Islamic banking instruments (Wakala Sukuk).</li></ul> <p><b>Further examples:</b></p> <ul style="list-style-type: none"><li>- First USD 70 million biodiversity bond issued by Inter-American Development Bank (IDB) Invest and Banco Bilbao Vizcaya Argentaria Colombia S.A. in cooperation with IFC<sup>39</sup>. The bond supports green projects aimed at combating biodiversity loss in Colombia. The project categories include productive land use and sustainable agriculture, freshwater and sustainable marine production, nature-based solutions, waste and plastic management, forestry and plantations, and tourism and ecotourism services. The bond is expected to contribute to the following United Nations SDGs: SDG 2 (Zero Hunger), SDG 12 (Responsible Consumption and Production) and SDG 15 (Life on Land).</li></ul>
Other information	<ul style="list-style-type: none"><li>- One of the most popular asset classes for investors, the issuances of green and blue bonds are constantly growing.</li></ul>

<sup>39</sup> [BBVA Colombia - Biodiversity Bond | IDB Invest](#)

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- A special type of green bonds are green impact bonds where the interest to the investor is only paid back at the maturity date if certain impact Key Performance Indicators (KPIs) have been met. Such are riskier for investors and hence, only attractive to a certain investor type or with additional securities (grants / guarantee) on the interest payments.

### 4.1.3 Regulatory instruments for governments

#### Debt for Nature Swap (DFNS)<sup>40</sup>

##### Description of instrument

A debt swap is a refinancing arrangement where a country restructures its debt in exchange for specific governmental commitments. The main goal is to lower the costs associated with servicing external debt, such as interest payments and fees. In the context of Debt-for-Nature Swaps (DFNS), the government commits to investing in local environmental projects and advancing national climate or biodiversity strategies, as outlined in the swap agreement with creditors. The swap itself is created by the debtor country repurchasing its sovereign debt through a tender offer. The buyback is funded by new financing sources, which may be realised by issuing green bonds, blue bonds, trust funds, or borrowing sustainable loans. Crucially, this new financing must offer reduced debt servicing costs compared to the existing debt. The savings achieved from these lower costs are a primary benefit of DFNS, allowing part of the relieved funds to be redirected towards biodiversity and nature conservation projects, often implemented by NGOs.

To facilitate a cheaper refinancing, credit enhancement instruments such as guarantees from DFIs, or MDBs, or insurances are often employed. These entities are motivated by the furtherance of conservation for development goals. Consequently, effective monitoring and reporting of conservation outcomes might be required.

<sup>40</sup> R. C. Brears (2022): Financing Nature-Based Solutions, Palgrave Studies in Green Finance; White and Case LLP (2023): Debt-for-nature-swaps: A viable alternative for vulnerable economies amid global challenges; International Monetary Fund, Washington, DC (2022): "Debt-for-Climate Swaps: Analysis, Design, and Implementation." IMF Working Paper 2022/162; Clifford Chance (2023): Debt-for-nature-swaps: A new generation

**Debt for Nature Swap (DFNS)<sup>40</sup>**

	Depending on the agreement, funds allocated for conservation can be disbursed either entirely at the beginning of the swap or gradually over the refinancing period. These funds may be directly provided to NGOs or managed through a dedicated conservation trust fund to ensure effective distribution.
Possible beneficiaries	Governments of the Range States
Transaction costs for set-up of instrument	Very high transaction costs for: <ul style="list-style-type: none"><li>- Identifying the debt to be refinanced and negotiations with debtors potentially included in the buy-back;</li><li>- legal advisory and documentation to structure the buy-back of the sovereign debt;</li><li>- alignment / establishment of national conservation and biodiversity strategies with targeted conservation actions to be financed with the DFNS;</li><li>- costs for the refinancing instrument (green bond, conservation trust fund or sustainability loan);</li><li>- legal advisory, documentation and/or certification for the set-up of the refinancing instrument;</li><li>- marketing and communication material for investors and investor engagement for the refinancing instrument (in case of bond or trust fund);</li><li>- evaluation, selection and management of the conservation projects that should benefit from the DFNS;</li><li>- management of use of proceeds and interest payments to investors of the refinancing instrument;</li><li>- financial reporting and reporting on conservation targets;</li><li>- other related legal advisory.</li></ul>
Reporting requirements	Reporting is required in different forms. Depending on the refinancing structure this includes reporting in relation to the bond, trust fund or loan agreement (whatever is chosen for the refinancing). Reporting is also required on the buy-back agreement of the initial debt and the conservation agreement and the conservation impact. It is advised for the debtor government to implement a transparent public reporting on the conservation milestones to gain trust of the investors of the refinancing instrument.

## Debt for Nature Swap (DFNS)<sup>40</sup>

<p>Accessibility for CAMI stakeholders</p>	<p>A DFNS can only be implemented by the governments of the Range States. Hence, initial governmental commitment and lead is required. Since a DFNS is a complex instrument, involving several jurisdictions and other governments as creditors specific legal consultation and expertise is required. In addition to that specific expertise in conservation and the linkage between debts swap and the conservation is needed. The complex structure and high preparatory work for the set-up of a DFNS makes it advisable to cooperate with a knowledgeable partner which is experienced in the organisation and set-up of a DFNS (e.g. TNC).</p> <p>Potential third-party involvement:</p> <ul style="list-style-type: none"> <li>- Creditor of the initial sovereign debt to be swapped;</li> <li>- project advisor for the technical and financial set-up of the DFNS;</li> <li>- legal advisor for the legal documentation;</li> <li>- financial institution as underwriter and/or structuring agent for the refinancing bond;</li> <li>- in case of refinancing via bond - external reviewers to certify compliance with bond standard;</li> <li>- financial institution as credit enhancers: FIs that provide guarantees to improve the credit rating of the issuer (this can be in form of an insurance or guarantee);</li> <li>- external auditor / third party to verify and report the use of proceeds and compliance with green objectives;</li> </ul>
<p>Benefits</p>	<ul style="list-style-type: none"> <li>- Suitable option for governments with borrowing constraints due to high credit risk and borrowing costs;</li> <li>- Governments free up financial resources for investments into conservation projects</li> <li>- If concessional climate finance or grants are not available or accessible DFNS can be a good alternative</li> <li>- Sustainable re-financing option if the sovereign risks is highly dependent on climate and nature risk;</li> </ul>
<p>Constraints</p>	<ul style="list-style-type: none"> <li>- Costly and lengthy process to set-up the structures for the DFNS;</li> <li>- Strong governmental engagement and from different ministries (finance, environment etc.);</li> </ul>

## Debt for Nature Swap (DFNS)<sup>40</sup>

	<ul style="list-style-type: none"><li>- Debtors need to agree to the DFNS;</li><li>- Funds that are going to conservation projects are limited, and depending on the amount of debt relief;</li><li>- Financial flows into conservation can be cut-down if the repayment of the debt is endangered due to the priorities of the financial flows.</li><li>- Engagement of different institutional actors (FIs to issue the bond, insurances, FIs to manage trust fund);</li><li>- Buy-in of local NGOs and communities which take care of the conservation area;</li><li>- Complex structures require legal advisory;</li></ul>
Best practice	<p><b>Gabon DFNS (August 2023)</b></p> <ul style="list-style-type: none"><li>- Debt was re-financed by issuance of blue bond notes in combination with loan instrument</li><li>- Bond issuer: Gabon Blue Bond Master Trust Series 2 (Trust fund)</li><li>- Size of the bond: USD 500 million, due 2038</li><li>- Issuance was arranged by the Bank of America</li><li>- Proceeds of the bond were used to fund a 15-year loan of USD 500 million to a trust fund of Gabon government (Gabon Blue Bond Master Trust Series 1)</li><li>- Credit enhancement through a political risk insurance (PRI) provided by the US International DFC. Improved credit rating (Aa2 compared to Gabon's sovereign debt rating of Caa1). The PRI is limited to the principal amount of the blue loan and 7 months of interest thereunder (and does not include default interest, indemnity payments or make-whole amounts);</li><li>- Conservation efforts are financed by Gabon as a share of Gabon's interest payments under the blue bond and loan. The other interest obligations were financial interest (largest component, applied to payments under blue bonds) and endowment interest (funds endowment account for long-term conservation projects);</li><li>- The Nature Conservancy (TNC) developed the conservation milestones and oversees Gabon's compliance to them, it supervises the endowment account funding and oversees the activities of a conservation fund that was funded by Gabon and TNC</li><li>- In case of non-compliance with conservation milestones, Gabon would be required to make periodic payments to the blue loan lender. Additionally, breaching conservation milestones beyond defined grace periods may result in a major commitment default which could trigger</li></ul>

## Debt for Nature Swap (DFNS)<sup>40</sup>

cross-default on Gabon's other external debt instruments. The DFNS thus contains strong financial incentives to respect the conservation milestones

- Conservation efforts: USD 125 million towards marine conservation, nature-based strategies for climate adaptation and sustainable economic development in Gabon, finance a marine spatial plan (increase area of ocean under protection), improve management of protected areas and support Gabon's sustainable blue economy

### **Seychelles DFNS (May 2023)**

- USD 21.6 million of debt was re-financed by a loan from the dedicated Seychelles Conservation and Climate Adaptation Trust to the government of the Seychelles
- Trust was funded by TNC through its own resources, grants and donations;
- Credit enhancement was provided by USD 3 million of proceeds of a blue bond issued by the World Bank which were contributed to the Seychelles Conservation and Climate Adaptation Trust;
- Conservation efforts are financed by the repayments of the loan from the government of the Seychelles to the Trust with a fraction set aside to establish an endowment dedicated to funding conservation projects permanently.

### **Further examples:**

- Ecuador Galapagos DFNS<sup>41</sup>: USD 1.628 bn debt from Ecuadorian government bonds swapped. The debt buy-back was financed by a USD 656 million Galápagos marine conservation-linked bond (Galápagos Marine Bond) which was passed on to the government as a loan. The bond was arranged Credit Suisse in cooperation with the U.S. International DFC, IDB, Credit Suisse, Oceans Finance Company (OFC), and the Pew Bertarelli Ocean Legacy. The operation was supported by an USD 85 million IDB guarantee and an USD 656 million DFC political-risk insurance to Ecuador to purchase existing public debt at better terms. The savings in debt cost will partly fund the Galápagos Life Fund, which will finance conservation activities over the next 18.5 years in both the Galápagos Marine Reserve and the protected conservation area Reserva Marina Hermandad. The deal took 3 years to be set-up.

<sup>41</sup> [Financial Close Reached in Largest Debt Conversion for Marine Conservation to Protect the Galápagos | DFC](#)

Debt for Nature Swap (DFNS) <sup>40</sup>	
Other information	<ul style="list-style-type: none"> <li>- Most of the DFNS have been conducted with debtors from the Paris Club using official development assistance – eligible debts where compliance with Paris agreement targets can be a driver for such transactions for the creditors.</li> <li>- the financial resourced acquired by a DFNS can be leveraged by a trust fund managed by NGOs through which additional private investments can be collected for the conservation projects agreed within the DFNS.</li> </ul>

Other tax schemes or incentives	
Description of instrument	<p>Different instruments are possible:</p> <ul style="list-style-type: none"> <li>- Environmental taxes / charges that incorporate the costs of environmental damage into the price of goods borne by a taxpayer</li> <li>- Carbon taxes (see above on carbon markets)</li> <li>- Environmental tax credits which are deducted from the total amount of the taxpayer if projects that are eligible for tax credits have been implemented</li> <li>- Subsidies for environmental / biodiversity supporting activities in infrastructure, buildings and land-use</li> <li>- Eco-labels or other sustainable biodiversity-positive labels</li> <li>- Agricultural land retirement schemes</li> </ul>
Possible beneficiaries	Enterprises, NGOs
Transaction costs for set-up of instrument	We can make no estimations on the transaction costs.
Reporting requirements	Depending on the instruments.
Accessibility for CAMI stakeholders	Only the governments of the range stated can set-up such instruments.
Benefits	Such governmental incentive schemes are a large-scale solution covering the whole country. Depending on the set-up such schemes can mobilise large financial resources in case of taxes or can increase the implementation of conservation solutions in case of incentives (e.g. for green roofs)

## Other tax schemes or incentives

### Constraints

- As for governmental carbon market or PES schemes also other incentive schemes require suitable financial resources, political coordination, know-how, infrastructure and regulatory supporting environment for the implementation of the desired scheme and its governance.
- Governmental incentives can only benefit biodiversity / conservation projects if the government channels the tax revenues into a dedicated trust fund for national conservation which can then benefit NGOs and local communities.

### Examples

- **Mongolia Natural resource payments**<sup>42</sup>: Tax payments that are collected for use of natural resources. The government dedicates large share of these payments to conservation actions to increase the national budget to conservation activities.
- **Stormwater tax credits** (various US states and cities<sup>43</sup>): Incentivise land or building owners to invest in and install storm water collection / absorption measures (such as rain gardens, green roofs, utilities to re-use storm water etc.)

## Public-private partnerships (PPPs)<sup>44</sup>

### Description of instrument

Public-Private Partnerships (PPPs) represent strategic collaborations between government entities and private sector organisations to deliver public services or assets more effectively. Usually, the cooperation is facilitated by using a project special purpose vehicle, specifically created with the purpose to deliver the objectives of the project. For payment models there are two types, either user payments or governmental payments.

Traditionally, PPPs were predominantly utilised in large-scale, long-term infrastructure development, particularly in the energy, water or transport sectors. In infrastructure related PPPs, conservations aspects are usually not the focus but can be integrated for example by setting requirements for land-use that aligns with conservation goals. However, the application of PPPs has also expanded into nature

<sup>42</sup> [The improved implementation of the Mongolian law on natural resources use payment has tripled the country's environmental expenditure | BIOFIN](#)

<sup>43</sup> [Commercial Stormwater Credits - City of Minneapolis](#); [Stormwater Utility Fee and Credits - Gwinnett | Gwinnett County](#); [Storm Water Credits Calculator - Merritt Island Redevelopment Agency](#)

<sup>44</sup> R. C. Brears (2022): Financing Nature-Based Solutions, Palgrave Studies in Green Finance

Public-private partnerships (PPPs) <sup>44</sup>	
	<p>conservation focussed projects. Conservation-focused PPPs manifest in various forms for example:</p> <p><b>Tourism Partnerships:</b> These arrangements typically involve state-owned protected areas granting concessions for sustainable ecotourism operations, encompassing accommodation facilities, retail establishments, and dining venues.</p> <p><b>Biodiversity Management and Regeneration Partnerships:</b> These can be structured in multiple ways. For example by utilising private sector management of state-owned protected areas or private land management for public benefit in conjunction with governmental oversight (such as implementing sustainable drainage systems on privately held land).</p> <p>The partnership structure and contractual framework are tailored to align with national regulatory requirements and the specific ownership situations of protected or other areas.</p> <p>An emerging variant is the Public-Private-Philanthropic Partnership (4P) model, which introduces philanthropic organisations as additional stakeholders. This enhanced framework attracts supplementary financial resources, as philanthropic entities typically demonstrate greater willingness to support innovative, yet unproven solutions due to their higher risk tolerance.</p>
Possible beneficiaries	Private sector participants of PPPs may include corporate entities, NGOs, community cooperatives, academic institutions, independent foundations or philanthropic organisations.
Transaction costs for set-up of instrument	<p>Medium high transaction costs for:</p> <ul style="list-style-type: none"> <li>- Identification of suitable PPPs projects + structuring of PPPs project (type, term etc.)</li> <li>- Procurement / tender process;</li> <li>- Legal advisory for PPPs contract and relating operational contracts;</li> <li>- Monitoring and reporting on the progress of the PPPs project (as agreed in the PPPs contract);</li> <li>- Management and long-term monitoring of the PPPs once it is operational.</li> </ul>
Reporting requirements	Depending on the type of PPPs and in any case as contractually agreed. Mostly long-term reporting, at least for the term the PPPs is operational.
Accessibility for CAMI stakeholders	<p>PPPs require involvement of one or more governmental bodies and private actors.</p> <p>Potential third-party involvement: legal advisor for the legal documentations.</p> <p>For the set-up of PPPs for complex infrastructure PPPs the involvement of technical advisory can be considered, such as from the Public Private Infrastructure Facility (PPIAF).</p>

Public-private partnerships (PPPs) <sup>44</sup>	
Benefits	<ul style="list-style-type: none"> <li>- The public sector can create stable and positive enabling conditions for the current and future projects, including fostering policies, incentives, regulations, and support mechanisms;</li> <li>- Public sector financial contribution can reduce the risk perception of the project for private investors and make it more attractive to private financing;</li> <li>- The private sector can bring in the industry / sector expertise and capacities to establish suitable business models and mobilise resources to grow and deploy solutions at scale;</li> <li>- The broader social sector (NGOs/non-profits such as advocacy organisations, think tanks, and service providers), when brought into the partnership, can ensure solutions are delivering impact for all stakeholders, including women, children, indigenous communities;</li> <li>- If PPPs include philanthropies, they can bring an end-to-end cross-sectoral view to enable closer collaboration across different actors.</li> </ul>
Constraints	<ul style="list-style-type: none"> <li>- Requires enabling policy and regulatory environment on national / regional level and clear ownership situations of the area to be worked on;</li> <li>- Lengthy process before PPPs agreement, including public tendering and procurement;</li> <li>- PPPs agreements should include conflict management plans to avoid the risk of break-up of the PPPs and to enable continuous cooperation between the involved PPPs parties thorough the term of the PPPs;</li> <li>- Risk of cost-overrun are with private investors and may negatively impact their decision to enter into a PPPs if the risk is not equally distributed;</li> <li>- PPPs usually target only a limited number of projects which restricts the scalability of such investment opportunities.</li> </ul>
Best practice	<p><b>Infrastructure focussed PPPs:</b></p> <p><b>Singapore: Ecological road crossing corridor for animals - Eco-Link@BKE<sup>45</sup></b></p> <ul style="list-style-type: none"> <li>- The government of Singapore together with private consulting firms have designed and build an ecological bridge sitting over the Bukit Timah Expressway (BKE). It lets animals cross safely between the Bukit Timah Nature Reserve and Central Catchment Nature Reserve.</li> </ul> <p><b>Biodiversity conservation focussed PPPs:</b></p>

<sup>45</sup> [Eco-Link@BKE](#)

## Public-private partnerships (PPPs)<sup>44</sup>

### **Guatemala: Sustainable agriculture in Laguna del Tigre National Park<sup>46</sup>**

- The project is the result of a public-private partnership between various stakeholders including, the Guatemala Wildlife Conservation Society (WCS), the National Council of Protected Areas (CONAP), members of the Roundtable for Sustainable Palm Oil (RSPO) and Solidaridad
- The partnership brought together sustainable palm oil production practises and conservation and protection efforts in the national park.

### **Sumatra: Peat swamp restoration<sup>47</sup>**

- Governmental and private actors from the fiber, pulp and paper industry committed to the ecosystem restoration programme, Restorasi Ekosistem Riau (RER)
- The concept consists of conserving a defined area of natural forest for every hectare of plantation. The conservation is financed by the involved private companies which are operating based on five 60-year ecosystem restoration concession licenses granted by the Indonesian Ministry of Environment and Forestry

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<sup>46</sup> [Public-Private Partnerships Achieve Breakthroughs in Biodiversity Conservation - Solidaridad Network](#)

<sup>47</sup> [Public-Private Sector collaboration to protect and restore ecologically significant tropical peat-swamp forest in Sumatra | IUCN](#)

# 5 Recommendations

## 5.1 General considerations for the identification of financial instruments

To identify suitable financial instruments for the implementation of the CAMI PoW activities, governments of the Range States should foster the creation of instruments that align with their national budgets and capacity for biodiversity conservation, and at the same time considering the needs of both implementing conservation organisations as well as of private investors.

From the governments and public investors and financiers' perspective, it might be essential to acknowledge the crucial need to mobilise private investments. This is due to the fact that the participation of private investors can significantly increase financial flows into biodiversity and nature-related projects, reduce the burden on governmental budgets, and potentially attract further private financing through first-movers. Consequently, financial instruments should be designed to include private investors and address their needs, as outlined in Section 2 of this report. These include preferences for **large-scale or scalable investment opportunities**, robust **risk management mechanisms**, suitable **returns on investment**, and **verifiable impacts**.

As described in Section 3 of this report, the most important requirement for a financial instrument from the implementing organisations were **sustainable long-term financing**, **flexible use of financial resources** (e.g. to cover also activities such as research) and **financing that is directly provided to the implementing organisations**.

### Using umbrella instruments that can attract larger financial volumes to support the implementation of regional instruments

The set-up of regional or (sub-)national instruments such as PES, carbon markets or ecotourism is time and resource intense. The financial resources, know-how, research and policy work that is required to establish such instruments shall not be underestimated. The initial transaction costs for the set-up can either be covered by long-term dedicated grants (if available), philanthropic or governmental contributions or by financial support from private investors via a larger financial instrument such as a green bond or DFNS. Such instruments can provide the substantial funding required not only for the setup of regional initiatives but also for associated costs, including research, community engagement, and policy development.

### Attract private investors by using well-known investment instruments that address their needs

To attract investors well-known instruments such as green bonds or DFNS can be utilised. The investment portfolio should address the investors desire for large scale investments and replicability of projects. For example, projects financed through green bonds or DFNS—such as PES or ecotourism schemes—should be designed to operate at a (sub-)national level, since they are by this offering opportunities for replication and scalability on a country-wide level, which may be preferred by private investors due to the potential for higher returns.

Furthermore, the projects that are to be financed from the green bond or DFNS should have to some extent government support for example through financial contributions, guarantees or regulatory support, e.g. to legally enable the implementation of certain schemes. If instruments are implemented without government-supported schemes, there is a risk that the instruments will only have a very localised impact and may not be considered scalable from investors' perspectives. Without governmental support the instruments may also be perceived as of high risk by investors and therefore attract only limited amounts of private financing.

## **Addressing the need for long-term, flexible and unrestricted use of financing resources for specific on-the-ground implementation by NGOs and local organizations**

Market-based finance mechanisms that rely on a commercial business model, e.g. PES schemes, certified ecotourism schemes or carbon credit markets, might be the most feasible option for providing flexible and unrestricted funding for conservation on the ground and creating financial returns in the long-term. With these instruments NGOs or local organisations can have direct access to the generated financial resources and can allocate it directly to their conservation priorities. Also, these instruments can make the implementation on the ground more independent from grants or other voluntary contributions.

## **Combination of instruments for diversified income sources**

Both, from investors but also from an implementing organization's perspective it is advisable to implement more than one regional or (sub-)national instrument (e.g. PES, ecotourism or carbon markets) to create a diversified project portfolio and diversified income streams. This diversification can at the same time contribute to a suitable risk management of the investment. To further attract private investors the instruments should entail elements of measurable impact and return on investment. Hence, the projects implemented by the funding should include some commercial elements (which is provided by PES, ecotourism, PPPs and carbon markets) or, as seen in some other existing examples (e.g. Indonesian Green Bonds), include other sustainable projects and not only conservation projects, for example renewable energy or sustainable infrastructure projects which can bring more short-term returns on investment.

## **Designing comprehensive financing mechanisms**

Given the interconnected and interdependent nature of conservation activities a suitable finance mechanism should be designed to address diverse aspects of conservation including policy work, scientific research, capacity building and species and landscape protection. Other successful funding stories for biodiversity conservation demonstrate that green bonds or DFNS have the potential to serve this purpose if designed together with national/regional market-based schemes and security providing mechanisms such as grants or guarantees from governments or MDBs or DFIs.

## **Financing for activities in the CAMI PoW**

Some of the instruments introduced in this report have the potential to provide financing for various activities in the CAMI PoW, though some of them are suitable for only specific activities.

Specifically, green bonds or DFNS can be structured to fund a large variety of activities that are linked to the measures outlined in the CAMI PoW. For example, financing from green bonds or DFNS can be utilised to implement regional sustainable wildlife use schemes which would provide a long-term funding source for the implementing NGOs and governments, e.g. PES, ecotourism or carbon market schemes. This would support the implementation of the CAMI activities related to alternative livelihood but also on community engagement and sustainable use (activities 5.1. to 5.15). But the funding coming from green bonds or DFNS may not be restricted to the set-up of such schemes (PES, ecotourism or carbon markets) but may cover other activities that are related to and support them.

The funding from a green bond or DFNS could support specific activities on capacity development for training on funding schemes, capacity building for the set-up of sustainable wildlife use and/or capacity development for protected areas and community-based rangers (CAMI activities 7.1 –7.5). As green bonds or DFNS allow funding for a broad range of activities that are related to biodiversity or nature conservation also activities such as policy cooperation, activities on illegal hunting (activity 2.1. or 2.7), on industry and infrastructure development (activity 3.4 or 3.6) or on overgrazing and livestock competition (activity 4.2.) could benefit from funding coming from a green bond or DFNS. For example, activities on infrastructure development that are protecting migratory mammals are also securing and supporting an ecotourism scheme that is related to the protected mammals. Similar applies to policy and cooperation that support the protection of mammals that are connected to PES or ecotourism schemes.

Instruments such as PES, ecotourism or carbon markets themselves can, in particular, provide the financial resources for the species-specific and landscape related activities (CAMI activities 9– 28), depending on where such instruments are implemented and which species are living in the areas (e.g. development of a carbon market scheme for grasslands or other semi-arid landscapes (which can partially substitute income from grazing activities for herders) to protect the landscape from desertification and at the same time to benefit native species such as Asiatic Wild Ass or Goitered Gazelle).

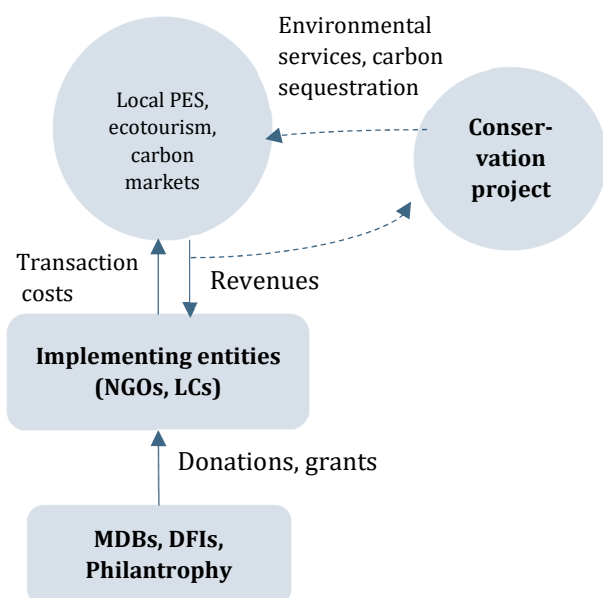
Other finance instruments, such as grants, tax incentives or subsidies may be suitable for single activities (e.g. to compensation payments to herders to avoid overgrazing (as in some areas in China), supporting CAMI activity on Overgrazing and Livestock Competition, 4.5.) but could most likely not cover a broader range of conservation activities as included in the CAMI PoW. Also, such instruments would require extensive financial resources from the government to provide the incentives and the set-up of the schemes would be linked to the establishment of related governance structure, legal bodies, authorities and administrative systems to implement and manage the tax or subsidies scheme. Hence, the aforementioned instruments could be a complementing component of a green bond or DFNS and can be included in a broader financing concept to have greater effect.

## 5.2 Recommendations on instruments and next steps

Based on the considerations in the previous section we recommend three different instrument variations. The three options take into account different capacities, strategies and financial resources of governments for biodiversity and conservation and offer different solutions respectively. The first instrument can be implemented without major financial spendings of the government or private investors but accordingly the financial impact may be limited. The second and third instrument are based on a larger involvement of governments as well as including private investors and have the biggest financial potential.

### Financing mechanism option 1 - NGO-centred mechanism

This option can be implemented by NGOs / local communities directly without involvement of the government.



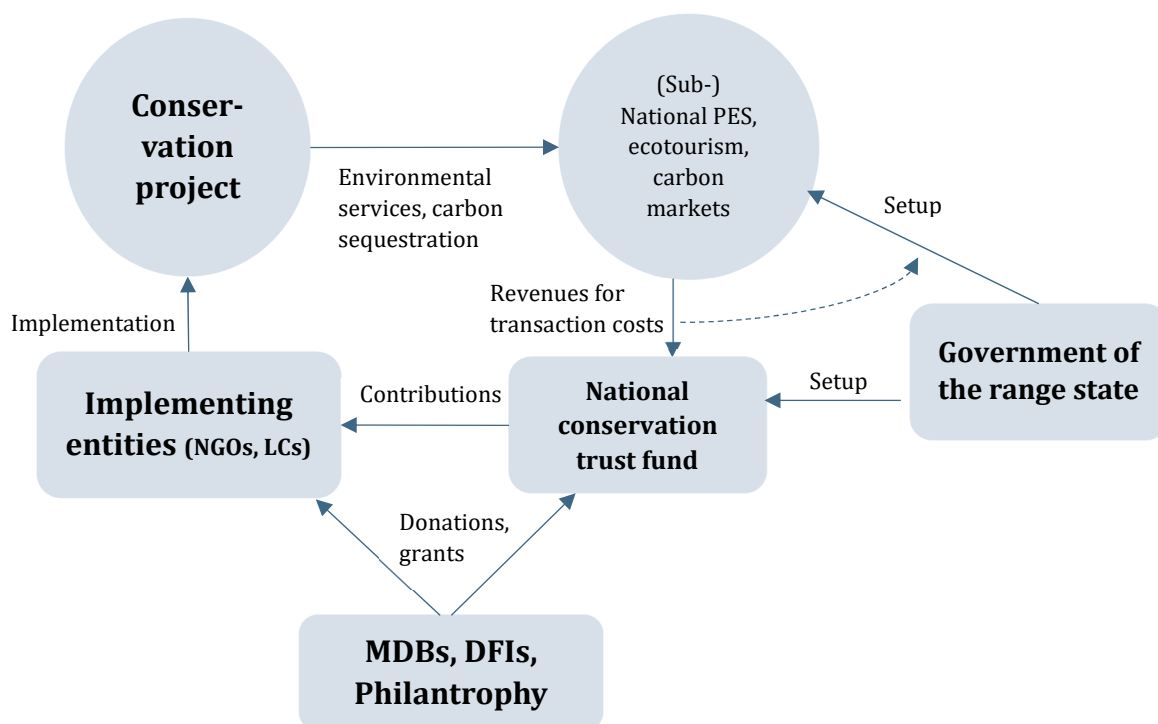
#### Enabling factors:

- Support for the setup of such schemes (including design and piloting phase) through dedicated grants and/or technical assistance
- Experienced technical partner(s) that support the setup (GEF for PES or SouthPole for carbon markets) or have experience with the instruments
- Clear tenure rights that allow for the setup of PES and mutual agreements with involved parties (landowners) that payments shall benefit further conservation works on the affected areas
- Agreement, support and involvement of local communities in the schemes
- Accreditation for available and acknowledged certifications (e.g. for voluntary carbon markets or ecotourism)

### Financing mechanism option 2: Government-supported mechanism (without debt financing).

The mechanism involves national PES/ecotourism or carbon market schemes, which create more investment opportunities because more projects can be set up under a common scheme on a country wide basis instead of only locally originated projects as in Option 1. The setup of these schemes should be steered and funded by the

government budget. Additional funds can be collected through a dedicated governmental conservation trust fund. Parts of the collected funds can also be distributed to NGOs implementing conservation projects.



#### Enabling factors:

Same factors as for option 1 and in addition:

- Establishment of a governmental conservation trust fund and dedicated control mechanism for the fund to ensure that the funds are only distributed to dedicated conservation as defined in the trust documents
- If various ministries are involved in the collection of the funds: Each ministry should be aware of its specific responsibilities. There should be regular communication platforms for the involved ministries to exchange on the status of the funds.
- Sufficient governmental financial resources and state budget that can be dedicated to the implementation and operation of the instrument(s)
- Trust fund financing policy is linked to national conservation targets and strategies
- The government should secure one or more anchor investors for the conservation trust fund (such as MDBs or DFIs) to attract more donors

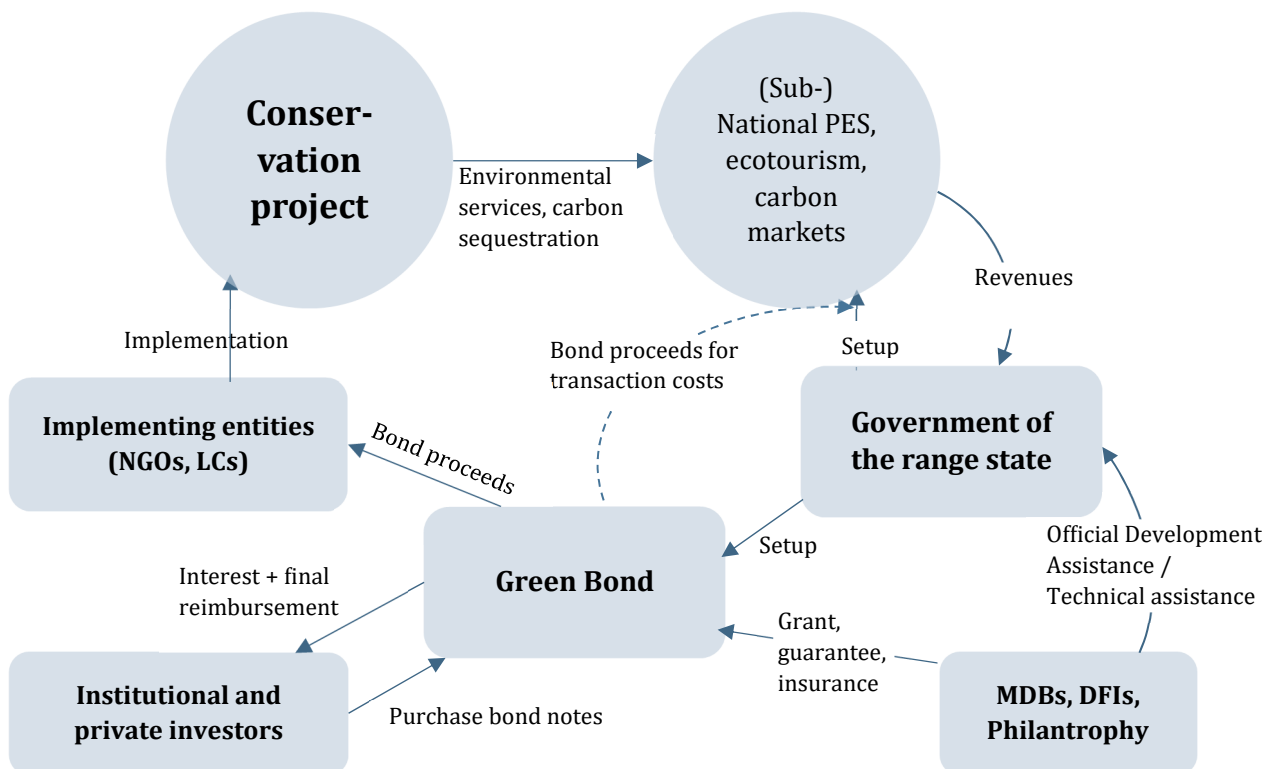
### Addressing financial constraints on governmental budgets for conservation and involving private investors

Government and philanthropic resources alone may not be enough to cover the financing needs in the CAMI region to set up long-term and self-sustaining financing mechanisms and schemes for nature and biodiversity conservation work. Hence, the involvement of private and public-private investments can help to bridge the financial gap. To involve private investors, the following recommendations should be considered:

- Utilisation of a rather standardised and scalable instrument (e.g., Green impact bond, DFNS or trust fund) issued by governments could serve as a financial support to establish national schemes that create sustainable financial resources for conservation (such as PES, ecotourism, tax schemes or carbon credits);
- Blended finance can be utilised (grants, guarantees or insurances) to make the instrument attractive for private investors and to reduce the borrowing costs for governments
- The instrument should align with or account for international targets or standards that are accepted by private investors and serve their desire for compliance with international targets and policies (SDGs, GBF, TNFD or other frameworks)
- Diversified project pool for management and reduction of investment risk. This could mean that one portion of the bond funds could go to dedicated conservation projects and supporting governmental schemes and another portion could go to green energy or infrastructure projects
- Design/promote the investment projects in a way that addresses climate change, nature and biodiversity loss and socio-economic challenges
- Transparent and sufficiently comprehensive reporting on impact data for the investment projects needs to be set up. There are existing data tools which can be utilised (e.g. [Integrated Biodiversity Assessment Tool \(IBAT\)](#)).

**Financing mechanism option 3: Government-supported mechanism (with debt financing).**

A mechanism involving private investors could include national PES / ecotourism or carbon market schemes. The national wide implementation creates more investment opportunities because more projects can be set up countrywide. The set-up will be steered by the government. The funds needed for the setup of the national schemes will be collected through a sovereign green or impact bond. If a government does not have the capacity to borrow debt, a DFNS may be an option instead of issuing only a green bond.



### Enabling factors:

Same factors as for option 1 and in addition:

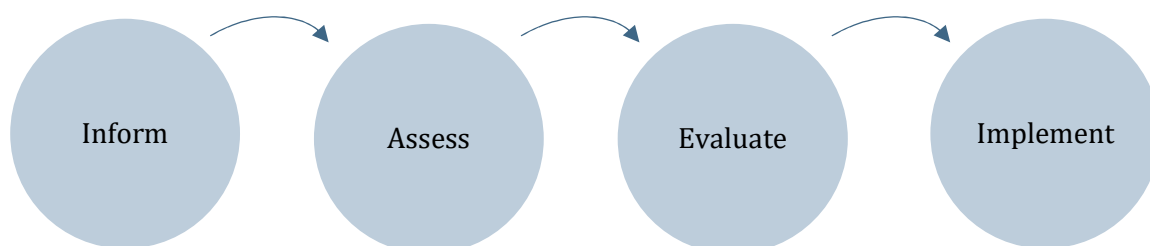
- (Sub-) national strategies that legally enable the implementation and operation of the instrument(s)
- Dedicated national plans, procedure plans and feasibility studies to implement national schemes;
- Sufficient governmental financial resources and state budget that can be dedicated to the implementation and operation of the instrument(s)
- Staff capacity, knowledge within government and/or technical partner to implement the instrument
- Diversified project pipeline with many projects / project volume exists that can be included into the bond and be financed by the bond proceeds
- Suitable credit rating of the government to issue an attractive bond offer → otherwise, a DFNS may be a better option (e.g., if a government has high sovereign debt obligations)

### Finding the right instruments

For any instrument the successful design and implementation depends on factors that are very specific to the country where such instrument shall be implemented. In general, the most crucial factors are:

- a) An enabling environment with regards to national regulations and policies that support the implementation of market-based instruments or governmental instruments like tax/incentive schemes or PPPs.
- b) Existing Off-taker market and economic value of the nature / biodiversity conservation activity, this is highly relevant for market-based instruments and to some degree for PPPs. A suitable market and off-takers will ensure the activity generates commercial and financial revenues to be self-sustaining over a longer period of time.
- c) Local stakeholder engagement will foster the support and acceptance of the activities in the local environment and will bring local knowledge to improve the work on the ground and ensure the inclusion of local communities as beneficiaries of the activities.

There is not one instrument or combination of instruments that fits all countries or regions. Hence, it is recommended to conduct country-specific evaluation and feasibility studies to identify which instruments would be most promising in each context. If this could be done for a few CAMI Range States, these studies could serve as process concepts and blueprints for other Range States to do the same and to identify suitable financial instruments. The feasibility studies should be conducted in cooperation between governments, conservation organisations, affected local communities and relevant financial actors to include all relevant expertise.



<b>SUGGESTED NEXT STEPS (per country)</b>	
<b>Inform</b>	<ul style="list-style-type: none"> <li>- Present instruments and best practices to governments, local stakeholders and NGOs</li> <li>- Provide in-depth trainings on certain instruments that are of interest to NGOs or governments of the Range States</li> </ul>
<b>Assess</b>	<ul style="list-style-type: none"> <li>- Conduct policy and institutional review at national level</li> <li>- Create an inventory of existing and future policies and regulations that impact conservation</li> <li>- Establish financial resource planning (for governments and NGOs) for biodiversity expenditures (including, staff resources, project infrastructure, transaction costs, etc.) to evaluate the existing financial resources for the implementation of conservation works and desired instruments and to identify financial gaps which need to be covered by additional financial sources (international public or private financing)</li> <li>- Identify stakeholders, off-takers/buyers (for market-based instruments) and other required cooperating partners on a national and regional level</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>- Identify the most suitable instruments given the regulations, market and local stakeholders in the country</li> </ul>
<b>Implement</b>	<ul style="list-style-type: none"> <li>- Prepare the instrument(s) and their implementation in cooperation with the necessary partners</li> </ul>

## Annex 1 – List of interviews

Name of interviews person	Position of interviewed person & contact	Date of interview(s)	Other participants
<b>Fariza Adilbekova</b>	Associate Programme Management Officer, CMS	- 09.12.2024	Anne Neumann (adelphi) Johannes Stahl (adelphi)
<b>Laura Cerasi</b>	Fundraising Officer, CMS <a href="mailto:laura.cerasi@un.org">laura.cerasi@un.org</a>	- 10.12.2024	Anne Neumann (adelphi) Johannes Stahl (adelphi)
<b>Steffen Zuther</b>	CAMI species expert, Frankfurt Zoological Society <a href="mailto:steffen.zuther@fzs.org">steffen.zuther@fzs.org</a>	- 11.12.2024	Anne Neumann (adelphi) Johannes Stahl (adelphi)
<b>Tanya Rosen</b>	Tanya Rosen, Central Asia Director at ConservationXLabs, <a href="mailto:naryntrosen@gmail.com">naryntrosen@gmail.com</a>	- 17.12.2024	Anne Neumann (adelphi) Johannes Stahl (adelphi)
<b>Vera Voronova</b>	CEO of the Association for the Conservation of Biodiversity of Kazakhstan (ACBK) <a href="mailto:vera.voronova@acbk.kz">vera.voronova@acbk.kz</a>	- 17.01.2025	Anne Neumann (adelphi) Johannes Stahl (adelphi)
<b>Yasmeen Tel Wala</b>	Programme Management Officer at CMS <a href="mailto:yasmeen.telwala@un.org">yasmeen.telwala@un.org</a>	- 17.01.2025	Anne Neumann (adelphi)
<b>Tengiz Chikanayev</b>	Financing expert for UNDP and the government of Kazakhstan for biodiversity budgeting and expenditure review <a href="mailto:t.chikanayev@osce-academy.net">t.chikanayev@osce-academy.net</a>	- 21.01.2025	Anne Neumann (adelphi)
<b>Stefan Michel</b>	CAMI species expert	- 22.01.2025	Anne Neumann (adelphi) Johannes Stahl

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## Annex 2 – Interview questions

Questions
What are activities that most urgently need funding?
Which funding sources have been and are currently used to implement (marine/avian/terrestrial) CMS instruments and mandates (in your unit)?
What are the advantages and challenges related to those funding instruments?
What are perceived obstacles for obtaining funding?
Which instruments (other than grants) have already been discussed for your activities to implement the CAMI (such as carbon credits, payment for ecosystem services etc.)?
Who are the preferred recipients (entities) for the financing (e.g. governments, NGOs or local communities)?
Is there a preference towards more general or project/country specific use of proceeds of the financing?
What would the ideal funding / financing mechanism for your activities look like?
Other comments / remarks from the interviewed person?

## **Annex 3 – Overview on grant fundings**

Date of research: DEC 2024

Funding entity	Donors	Type of funding entity	Name of funding programme / facility	Funding purpose	Funding instruments	Appr. Funding amounts	Funding period / Project lifespan	Eligible applicants	Disbursement	Geographical coverage	Application deadline	Other observations
Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer
Global Environment Facility (GEF) UNDP	Participating donor countries	Multilateral fund	<a href="#">Global Biodiversity Framework Fund</a>	Support countries strengthen national-level biodiversity management, policy, governance, and resource mobilization, including blended finance to leverage private sector financing	Grants	Max. USD 50,000.	Depending on specific call	Government agencies, civil society organizations, private sector companies, research institutions	To GEF agencies which disburse further to the projects	Developing countries and countries with economies in transition	Depending on specific call	
			<a href="#">Small Grants Programme</a>	Improve the sustainability of protected area systems and mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors			Depending on specific call and country programme	National NGOs; community based organisations	Directly to applicants		Depending on specific call and country programme	
Asian Development Bank (ADB)	ADB	Multilateral Development Bank	<a href="#">Climate Change Fund</a>	Adaptation, clean energy/sustainable transport/low-carbon urban development, REDD+	Grant component of investments, technical assistance (stand-alone and piggy-back or linked to loan), and direct charge	For grants and TA the amount is depending on the overall financial assistance. For direct charge: max. \$225,000	Appr. 4-7 years	All ADB developing member countries (DMCs)	Directly to applicants	All ADB DMCs	ANNUALLY: 31 January, 31 March, 31 May, 31 July, 30 September, 30 November	
IUCN Save our Species (IUCN SOS)	Multilateral donors, (private) foundations, multilateral banks, European Commission, private companies	Funding programme	<a href="#">Save our species</a>	Protection of species that are Vulnerable, Endangered and Critically Endangered by the IUCN Red List of Threatened Species. Region focussed species protection (Central Asia, and others) Species focussed protection (Lemur, Gibbons, Tiger, Sturgeons)	Grants	No open calls, depending on specific call	No open calls, depending on specific call	National NGOs, individuals, Community based organisations, and administrators of protected areas and collaborations with governmental partners	Directly to applicants	Asia, LatAm, Africa	No open calls, depending on specific call	Grants operational manual: <a href="https://iucn.org/wp-content/uploads/2024/06/IUCN-SOS_Grants-Operational-Manual_June2024.pdf">https://iucn.org/wp-content/uploads/2024/06/IUCN-SOS_Grants-Operational-Manual_June2024.pdf</a>
Critical ecosystem Partnership Fund (CEPF)	MDRs, European Union, GEF, World Bank, Government of Japan, etc	Multilateral fund	<a href="#">CEPF grants</a>	Protection of priority species in biodiversity hotspots improve management of priority sites, enhance civil society capacity, provide strategic leadership of conservation investment	Grants and TA	Small grants: USD 15,000 Large grants: USD 150,000 In exceptional cases: >USD 500,000	No open calls for Central Asia, depending on specific call	Civil society organisations Government-owned institutions if they are independent, can apply for private funds and may not assert claim of sovereign immunity	Directly to applicants	Maintains of Central Asia and several other regions with biodiversity hot spots	Unclear (CIP is open for 6-8 weeks)	
Green Climate Fund (GCF)	UNFCCC member countries, other sovereign entities and foundations	Multilateral fund	<a href="#">Private Sector Facility</a>	Co-financing private sector investments in climate adaptation / mitigation	Concessional instruments, including low-interest and long-term project loans, creditlines to banks, equity investments and risk mitigates guarantees, first-loss protection, grant-based capacity-building programmes	Depending on the project	Project lifespan: (less than) 10 years to (more than) 30 years	Accredited entities such as Development finance institutions, United Nations agencies, conservation organizations	Development finance institutions, United Nations agencies, conservation organizations, regional institutions and others	Developing countries	Regularly updated on GCF website	
			<a href="#">Other GCF instruments</a>	Climate change mitigation and adaptation (incl. ecosystems and ecosystem services)	Grants, concessional loans, guarantees, equity and other instruments							
Darwin Initiative	UK Government	Governmental fund, ODA funding	<a href="#">Darwin Initiative Extra</a>	Biodiversity conservation and multidimensional poverty reduction with different focus for each grant (e.g. innovation projects should include novel approaches etc.), projects should be scalable	Grants	£800,000 to £5 million	Funding period: One time funding Project lifespan: 2 - 5 years	Lead organisations that are based in the target country, that is not a foreign government or government agency	Directly to applicants	Lower, Low- and Middle-income countries	Currently closed, unclear when next CIP will be issued	
			<a href="#">Darwin Initiative Main</a>			£100,000 to £900,000	Funding period: One time funding Project lifespan: 1 - 5 years					
			<a href="#">Darwin Initiative Innovation</a>			£10,000 to £200,000	Funding period: One time funding Project lifespan: 1 - 2 years					
			<a href="#">Darwin Initiative Capability &amp; Capacity</a>			£50,000 to £200,000	Funding period: One time funding Project lifespan: 1 - 2 years					
Legacy Landscapes Fund	German Ministry for Economic Cooperation and Development, KfW, NORAD, AFD, philanthropic partners	Foundation	<a href="#">Perpetual Grant</a>	Co-financing biodiversity protection in terrestrial landscapes that are ecologically largely intact and of global significance and is by 50% classified IUCN Category I / II and by 50% legally protected (e.g. as conservation area)	Grant	USD 1,000,000/	Funding period: As long as needed (estimated 50+ years)	NGOs and locally based actors (ICCA etc.) in countries that are eligible for Official Development Assistance	Directly to applicants	Terrestrial regions with biodiversity values	Currently closed, unclear when next CIP will be issued	The applicant need to prove other funding sources for the project in order to obtain the grants. For the sustaining grants the applicant shall develop a funding business plan for the time after grant period.
			<a href="#">Sustaining Grant</a>		Grant	USD 1,000,000/year	Funding period: 15 years					
Global EBA Fund	IKI, German ministries	Fund	<a href="#">Different call topics</a>	Catalytic and innovative ecosystem-based adaptation to climate change projects. In particular activities that address awareness and knowledge building, policy and regulatory gaps; expanding access to sustainable finance for ecosystem-based approaches	Grant	Between USD \$50,000 and USD \$250,000	Funding period: One time funding Project lifespan: 24 months, in special cases 36 months	Non-governmental organisations; International non-governmental organisations; Intergovernmental organisations; Community-based organisations; Indigenous People's Organisations; Universities and other academic institutions; Research institutes and think tanks; Private sector companies; Consortia of organisations that promote collaboration and greater impact around EBA. Government entities can be a part of the consortia as long as they do not receive funding from the Global EBA Fund	Directly to applicants	ODA eligible countries	Currently closed, unclear when next CIP will be issued	
Biodiversity Conservation Fund of Kazakhstan	UNDP, GEF	NGO Fund	Biodiversity Conservation Fund of Kazakhstan Grants	Preserving the biological diversity of Kazakhstan and sustainable nature management	Grants	Not public	Not public	N.A. Fund seems to implement only own projects	N.A.	Kazakhstan	N.A.	
IKI	German government		<a href="#">IKI Small Grants</a>	Climate change mitigation, adaptation as well as forest and biodiversity conservation, approaches that implement NDCs, Paris Agreement and Convention on Biological Diversity	Grants	between EUR 60,000 and EUR 200,000	Funding period: One time funding Project lifespan: 1 - 2 years	small regional, national, and local organisations based in an ODA-eligible countries		ODA eligible countries	15. Jan 25	

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