

Report

Assessment for forest financing at country level

Mongolia

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The EU-funded [Forests for the Future Facility \(F4\)](#) provides technical support to contribute to healthy forest ecosystems and forest-related value chains in Asia, Africa, the Caribbean and Latin America. The Facility is managed by [DG International Partnerships Unit F2 – Environment, Natural Resources, Water](#).

F4F is working in collaboration with CIFOR-ICRAF on the EU Action “Financing for Forests”.

Disclaimer

This assessment has been developed based on consultations with stakeholders and inputs from subject matter experts. It is important to note that the findings and recommendations presented herein do not necessarily reflect the official forest finance priorities or positions of Brazil. Additionally, this document does not represent the official views of the European Union. The content is intended to provide insights and support discussions in the context of forest finance but should not be interpreted as an endorsement of any specific policy or strategy.

Assessment context

This assessment of existing forest financing instruments at country level operates as the foundation for a proposed EU-funded Action ‘Financing for Forest’ FFF.

The Action intends to boost financing for forests at global level, by generating and sharing knowledge widely. In selected partner countries, technical assistance (TA) for the implementation of specific forest finance solutions/instruments will be provided. Prior the Action, an assessment is carried out in up to 15 countries to 1) help define which forest finance solutions will be tested and piloted and in selected countries (up to 7 countries will be selected for the Action “Financing for Forest”), 2) help EU Delegations (EUDs) and partners in other countries get a better understanding of existing financing mechanisms, and 3) generate knowledge about selected financial solutions/instruments.

As part of this assessment ahead of the Action, and to develop and implement a suitable methodology, the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) has been tasked to conduct the current assessment on forest finance mechanisms in several countries including Mongolia over the period July-October 2024; CIFOR-ICRAF support is formally delivered under a contract with the Forests for Future Facility (F4F), a technical assistance facility to the EC INTPA F2 on matters regarding sustainable forest management.

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Acronyms

ADB	Asian Development Bank
AFOCO	Asian Forest Cooperation Organization
Aimag	Administrative unit in Mongolia (equal to province)
BIOFIN	Biodiversity Finance Initiative
BTF	Billion Tree Fund
BTNM	Billion Tree National Movement
CAFÉ	Consortium of African Funds for the Environment
CIFOR-ICRAF	Center for International Forestry Research and World Agroforestry
CTF	Conservation Trust Fund
EU	European Union
EUD	European Union Delegation
F4F	Forests for Future Facility
FF	Forest Finance
FFS	Forest Finance Solutions
FUG	Forest User Group
GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit
HFP	Healthy Forest Project
ICCF	International Conservation Caucus Foundation
INTPA	International Partnership
KBGB	Khan Bank Green Bond
MECC	Ministry of Environment and Climate Change
MET	Ministry of Environment and Tourism
MNT	Mongolian tugrug (₮)
MoU	Memorandum of Understanding
MSFA	Mongolian Sustainable Finance Association
NFA	National Forest Agency
NRUF	Natural resource use fee
OECD	The Organization for Economic Cooperation and Development
PFE	Professional Forest Enterprise
RedLAC	Latin American and Caribbean Network of CTFs

Soum	Administrative unit in Mongolia (equal to sub-province)
TA	Technical Assistance
TNC	The Nature Conservancy
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UN REDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
UNDP	United Nations Development Programme
UNICEF	The United Nations International Children's Emergency Fund
USD	US dollar (\$)

1 EXECUTIVE SUMMARY

Mongolia's forests, covering 11.9% of the country's territory, are vital for environmental and socio-economic stability, providing soil and watershed protection, preserving permafrost, protecting biodiversity, and acting as carbon sinks. In addition, Mongolia's forest provides socio-economic benefits from both timber and non-timber forest products. These forests are categorized into boreal forests in the north and dryland woodland ecosystems in the southern regions. Despite their significance, the forest sector's contribution to GDP has declined from 4.7% in the late 1980s to 0.5% in recent years.

In order to address this decline and promote sustainable forest management, Mongolia has been implementing several forest finance solutions (FFS). Key FFS include state and local government budget, the Billion Tree Fund and the Nature Conservancy Conservation Trust Fund. In addition, Mongolia is taking significant steps towards developing carbon markets and integrating its forests into global carbon finance schemes. However, there is an urgent need to establish a proper legal framework to substantially develop the carbon market in the country. Recent initiatives, including the Billion Tree National Movement (BTNM) launched in 2021, aim to combat desertification and climate change by increasing forestation efforts. The Mongolian government has pledged to annually allocate 1% of GDP to the forestry sector, boosting reforestation and agroforestry programs.

Despite these efforts, Mongolia's forest sector faces challenges such as insufficient financial resources, policy instability, market limitations,

outdated technology, and slow growth rate of forests.¹² Addressing these challenges requires continued innovation in forest finance solutions, stable policy support, and enhanced private sector involvement and public private partnership. Assessing forest finance solutions in Mongolia will enable the forestry sector and its stakeholders to enhance funding flows and develop innovative financing tools, ensuring sustainable long-term financing for the sector.

The current assessment used literature review, interviews and inputs from experts on the subject as a baseline for the evaluation of current status and potential of forest financing in Mongolia.

The following table provides brief information on the FF contribution of each solution, based on the available data (Table 1).

The methodology of this assessment was developed and implemented by the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and the assessment on forest finance mechanisms in Mongolia was conducted over the period July-October 2024; CIFOR-ICRAF support is formally delivered under a contract with the Forests for Future Facility (F4F), a technical assistance facility to the EC INTPA F2 on matters regarding sustainable forest management.

In general, Mongolia is actively pursuing innovative forest finance solutions to address its environmental

1 Asian Forest Cooperation Organization. MONGOLIA: Country Profile and Context. 2022.

2 The Changing World of Mongolia's Boreal Forests. Available at <http://stories.unep-wcmc.org/borealforestsmongolia/index.html>

challenges and support sustainable forest management. The country's priorities focus on implementation of sustainable forest management, improved institutional and financial governance, community-led conservation efforts, and integrated environmental policies. Initiatives such as BTNM and public funds demonstrate Mongolia's commitment to long-term, sustainable funding

mechanisms for forest conservation and management. These efforts reflect a holistic approach that balances ecological preservation with economic development, emphasizing the importance of community involvement and climate resilience. By prioritizing these, Mongolia will ensure it is working towards creating more resilient forests, with higher economic contributions and improved value chains.

Table 1. Financial contribution from forest finance solutions

	FF solution	Financial contribution ^a	Time	Forestry application
1	State and local government budget	USD34.2 million (about MNT116.5 billion) for 2024	Annual	All forestry activity
2	Billion tree fund	USD3 million (about MNT10 billion)	Cumulative	Re/afforestation, forest restoration, agroforestry
3	Conservation trust fund	USD198 million	Cumulative	Protected area and buffer zone management
4	Khan bank green bond	USD10 million	Cumulative	Sustainable forest management Re/afforestation
5	Natural resource use fee	MNT109 billion (collected in 2023; approx. equal to USD32 million)	Annual	Forest restoration, reforestation
6	Public private partnership: Rio Tinto Healthy Forest	MNT7.4 billion (approx. equal to USD2 million)	Cumulative	Insect pest management, re/afforestation, forest restoration
7	Carbon finance	-	-	Sustainable forest management
8	Green development loan (EIB loan)	100 m EUR loan (first tranche)	Cumulative	Sustainable forest management
9	Biodiversity finance	-	-	NRUF governance
10	Eco-tourism	USD1 billion (generated in 2023)	Annual	FUG livelihood increase, recreational forest

a As of 20 October, 2024: USD1=MNT3398; EUR1=MNT3693=USD1.05

2 INTRODUCTION

2.1 Objective of the assessment

The objective of this assessment is to map the overall forest financing landscape in Mongolia by analyzing the current financial resources, identifying gaps, and exploring opportunities for enhanced forest finance. Forest finance solutions to be considered in the assessment of Mongolia include (but are not limited to) green budgeting, ecosystem service fees, forest funds/conservation trust funds, green bonds, carbon financing, and value chains, if any.

This report focuses on financing solutions that generate sustainable funding flows. While donor projects can provide technical assistance support to forest finance solutions (FFS), they are not considered FFS per se unless they directly create or capitalise forest finance instruments.

2.2 Background

Mongolia's forests are mainly located along the southern boundary of the Siberian taiga, forming a transition zone between Siberian boreal forest and Central Asian steppe desert. The country's forest area occupies about 11.9% (18.6 million hectares) of its territory and consists of two major forest biomes: boreal forests in the north, dominated by larch, birch, and pine; and dryland woodland ecosystem in the southern arid regions, comprising of Saxaul forests.³ Despite their relatively small coverage, Mongolia's forests are crucial ecosystems, providing soil and watershed protection, preserving permafrost, protecting biodiversity, and acting

as carbon sinks. In addition, Mongolia's forests provide socio-economic benefits from both timber and non-timber forest products.⁴

According to the Mongolian Law on Forests (2012; currently being revised),⁵ all forests belong to the state, however forests can be managed by forest user groups and professional forest enterprises based on the contract. This contract is initially issued for one year for preparation, then extended to 10 years, which can further be extended up to 60 years on 10-year basis of renewal. These different forest management entities are subject to preparing forest management plans, and obliged to protect, manage and utilize the forest resource. Forest user groups (FUGs) can only harvest non-timber forest products or fuelwood, and can be employed in reforestation and forest cleaning activities. Professional forest enterprises (PFEs) are private enterprises that have special license(s) for commercial use of forest resources from the Ministry of Environment and Climate Change (previously the Ministry of Environment and Tourism) – for instance, license to harvest and process timber from forests.

The National Forest Agency, along with the Ministry of Environment and Climate Change, is the main governing body for forest resources, while the utilization (harvesting and transformation) of forest resources is governed by the Ministry of Food, Agriculture, and Light Industries.

Until the late 1980's, the forest industry contributed up to 4.7% of gross domestic product (GDP) in the

3 Forest Research and Development Center, Mongolian Ministry of Environment and Tourism. 2020.

4 Asian Forest Cooperation Organization. MONGOLIA: Country Profile and Context. 2022.

5 Mongolian Law on Forests. 2012. <https://legalinfo.mn/mn/detail?lawId=12171>

country,⁶ and this percentage has continued to decline. As of 2018, the forest sector contributed to 0.5% of GDP⁷ (78 million USD), which decreased to 0.01% in 2023.⁸

Most of the financing in the forest sector used to come from the state budget, and significant financing came from international donor organizations. However, private sector involvement has recently been increasing. Several studies related to the financing of the forestry sector in Mongolia have been conducted. Major references are given in Annex 1.

In 2021, the President of Mongolia, U. Khurelsukh, announced the Billion Tree National Movement (BTNM) at the 76th session of the United Nations General Assembly and it was officially launched in October 2021. The Government of Mongolia (GoM) also increased its funding of forest sector, mostly contributing to re/afforestation and agroforestry programmes. GoM has pledged to spend 1% of annual GDP on the forestry sector. Since its inception, BTNM has received an extremely positive reception from the public, and this has led to increased forestry activities, including international collaborations. International donor assistance has so far played a relatively minor role in forest funding, but in recent years it has been increasing.

2.3 Diversity of funding solutions analyzed

In the inception report, some forest finance solutions were proposed to be assessed and prioritized, however during the process of assessment, some of these solutions were excluded, and new ones were added to the analysis:

- Fiscal reforms/green budgeting was excluded from the analysis due to lack of data and information on relevance to forest sector. However, it must be mentioned that in 2023, Mongolia expanded its green taxonomy to create an SDG Finance Taxonomy, which includes broader SDG-aligned, bankable economic activities.^{9,10}

6 National Forest Agenda. 2001. <https://legalinfo.mn/mn/detail?lawId=202623>

7 Assessment of Financing Mechanisms and Options for Mongolia's REDD + Action Plan. 2018.

8 National Statistics Office Bulletin. <https://www.nso.mn/mn/dissemination/72469488>

9 Mongolian Green Taxonomy https://www.sbfnetwork.org/wp-content/assets/policy-library/1270_Mongolia_Green_Taxonomy_2019_MSFA.pdf

10 https://www.unescap.org/sites/default/d8files/event-documents/SDG%20Taxonomy_MSFA.pdf

- Finance instruments for value chains that support conservation and restoration of forests were not assessed in this report. In Mongolia, the forest value chain is not well developed, and there is not enough data and information to assess the financial flow of the value chain at sector level. But it should be mentioned that the value chain development in wood processing has potential to be developed into an economy of scale with support through the introduction of advanced techniques, technologies and capacity building.¹¹
- An example of a blended finance EU-Mongolia Forest Partnership has been initiated; however, it is still in the early stages of development and there is not much information available for analysis.

Apart from these three FFSs, five other forms of FFSs were included in the analysis. In addition, the state and local government budgets are included, as it was suggested by stakeholders that these represent a major FFS for the country, and this needs further development in terms of transparency in allocation and monitoring of efficiency. Table 3 shows the FFS selected for analysis..

2.4 Key challenges for FFS in Mongolia

Mongolia's forest sector faces several key challenges that hinder its development and sustainability. Foremost among these is the lack of sustainable forest policy and poor management of financial resources, which affects government agencies, professional forest enterprises (PFEs), and forest user groups (FUGs) alike, impeding effective forest management and sector growth. The frequently changing policy and regulatory environment creates uncertainty, discouraging long-term private sector investment in the forest industry. There are many small scale PFEs, and annual allowable cut is distributed to them, but the commercial harvest quota per PFE is often too small to produce profitable production, and therefore only a few PFEs can apply for bank loans to upgrade their techniques for harvest and wood processing, which ensures economic benefit. FUGs cannot be involved in commercial forest management, and their major activities are limited to salvage cutting and NTFPs use. This is the main reason that FUGs tend to lose interest in participating in forestry activities. The

11 <https://reddplus.mn/eng/wp-content/uploads/2018/09/UNDP-Wood-Product-Value-Chains.pdf>

ideal solution would be to support them to participate in treatment cutting, which can yield marketable wood and raw material, and to develop forest value chains. Market limitations further slow economic benefits for the private sector in forestry, with outdated technology and equipment resulting in poor-quality products that struggle to compete in larger urban markets where the major demand exists. Additionally, the slow rate of tree

growth, lack of treatment cutting, and reduced harvesting in Mongolian forests poses a challenge for climate change mitigation efforts; however, it offers great potential for adaptation measures.

Table 2 elaborates on some of the key challenges, gaps and recommended measures for the forest sector and capacity to mobilize financing.

Table 2. Challenges, gaps and proposed measures

Challenges	Gaps	Proposed measures
Limited capacities for financial resource management	Limitations in allocation and management of financial resources in government agencies, PFEs, and FUGs.	<ul style="list-style-type: none"> Improve financial management frameworks Increase budget allocation for forest management and sector growth.
Unprofitable small-scale PFEs	<ul style="list-style-type: none"> Commercial harvest quotas are too small for profitability. Limited access to bank loans for technological upgrades. 	<ul style="list-style-type: none"> Consolidate quotas or support PFE cooperatives. Provide financial incentives or subsidies for equipment modernization.
Limited role of FUGs in commercial forestry	<ul style="list-style-type: none"> FUGs restricted to salvage cutting and non-timber forest product (NTFP) use. Loss of interest in forestry activities. 	<ul style="list-style-type: none"> Allow FUGs to participate in treatment cutting Support FUGs in developing forest value chains and marketable products.
Market and technology limitations	<ul style="list-style-type: none"> Outdated technology leading to poor-quality products. Inability to compete in larger urban markets. 	<ul style="list-style-type: none"> Invest in modern harvesting and processing technologies. Facilitate market access for forest products in urban centers.
Climate change mitigation, Challenges and slow carbon accumulation in forests	<ul style="list-style-type: none"> Slow tree growth and limited treatment cutting. Reduced harvesting limits carbon sequestration potential. Limits the role of forests in climate change mitigation. 	<ul style="list-style-type: none"> Promote treatment cutting for sustainable yield. Develop adaptation strategies leveraging forest resources.
Underfunded forest sector	<ul style="list-style-type: none"> Insufficient funding for sector development. Outdated technology and market constraints hinder economic growth. 	<ul style="list-style-type: none"> Increase government and private sector investment. Introduce forest finance mechanisms to boost sector funding.
Lack of legal framework for forest finance	<ul style="list-style-type: none"> Inadequate legal framework for forest finance (FF) instruments. Limited access to carbon finance opportunities. 	<ul style="list-style-type: none"> Amend the Mongolian Law on Forests to support FF instruments. Develop legal pathways for carbon markets and green economy.
Monitoring and Evaluation	Lack of monitoring of outcome and effectiveness of FFs	<ul style="list-style-type: none"> Tracking the effectiveness of funds used in re/afforestation and forest restoration activities Accounting survival rate of seedlings
Data transparency	Lack of transparent, accessible data systems for stakeholders	<ul style="list-style-type: none"> Open database/public database for existing reports, data, inventory Support from NFA to provide access to stakeholders for open e-library
Inclusivity of Financing Solutions	Limited attention is given to expand the access to FF for rural communities, women and small businesses	<ul style="list-style-type: none"> Access to FF by Forest user groups needs to be expanded Gender strategy for environmental sector needs to be adopted to forest sector

Table 3. List of forest finance solutions (FFS)

Suggested FFSs	Short definition	Analysed (Yes/No)	Corresponding FFSs/ FFSs analysed	Short definition
Fiscal reforms / green budgeting	The adjustment of fiscal policies and budgeting processes to reflect environmental sustainability goals, often incorporating the valuation of natural resources and ecosystems into financial planning	No Reason: lack of data, information on relevance to forest sector		
Payments for (Forest) Ecosystem Services / incentives schemes	Financial and/or non-financial incentives provided to landowners or communities for managing their land in ways that preserve or enhance ecosystem services, such as carbon sequestration, water filtration, and biodiversity	Yes		Currently enforced NRUF for forest resource is calculated based on the economic and ecological benefits of the forest resource ^b , and therefore ecosystem service payment is partially covered in the NRUF.
			Natural Resource Use Fee	A natural resource use fee is a payment made for the use or extraction of natural resources. In Mongolia, use or extraction of following resources are subject to fee: plant, water, forest, and wildlife. According to regulations, 85% of the NRUF collected from forest resource use is mandated to be spent back on forest restoration.
National forest funds / conservation trust funds	Dedicated funds established by governments or organizations to support forest conservation, sustainable management, and the development of forest areas through grants, incentives or loans	Yes	The Nature Conservancy: The Conservation Trust Fund	The Government of Mongolia, and the Nature Conservancy (TNC) launched the Conservation Trust Fund (CTF) in 2024, which is a part of the 'Eternal Mongolia' Project Finance for Permanence (PFP) initiative. This CTF will manage donor funding and invest effectively in conservation priorities.

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b Forest sector development program. ADB. 2023.

Table 3. Continued

Suggested FFSs	Short definition	Analysed (Yes/No)	Corresponding FFSs/ FFSs analysed	Short definition
			The Billion Tree Fund	Mongolbank and member organizations of Mongolian Bank Association established The Billion Tree Fund (BTF) in 2022 to manage funding from different sources. Currently, the Billion tree fund is primarily sourced from the banking sector, through donation and fundraising, collecting MNT30 from the commission of each low-value transaction between banks.
Green bonds / sustainability-linked loans	Financial instruments issued to fund projects with environmental benefits, with green bonds raising capital for upfront expenditure and sustainability-linked loans offering incentives for achieving sustainability performance targets	Yes	The Khan Bank Green Bond	Khan Bank issued Mongolia's first-ever green bond in 2023, marking a significant milestone for the country's financial sector and sustainable development efforts. The green bond proceeds will be used to finance projects in: renewable energy, energy efficiency, green buildings, clean transportation, sustainable agriculture, water management and treatment, and pollution prevention and control.
Finance instruments for value chains that support conservation and restoration of forests	Can include: concessions mechanisms, micro-credit schemes, SME support smallholder schemes, DFI and other funds (including benefits of EFSD+), company finance for smallholders & other SMEs (our grower schemes, off-take contracts), and venture capital/business catalysers. These instruments are strongly linked to value chains that can support conservation and restoration of forests with SMEs and smallholders	No Reason: Not large enough financial flow. Many small enterprises. Lack of forest value-chain development. Lack of data.		

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Table 3. Continued

Suggested FFSs	Short definition	Analysed (Yes/No)	Corresponding FFSs/ FFSs analysed	Short definition
Biodiversity markets (biodiversity credits/ certificates)	Markets designed to offset environmental impacts through the trade of biodiversity credits or certificates, representing actions taken to conserve or restore biodiversity	Yes	Public private partnership: Rio Tinto and Oyu Tolgoi case	Rio Tinto and Oyu Tolgoi set a goal to achieve a “net positive impact” on biodiversity in the southern Gobi region by the time of mine closure. They are working toward wildlife management, improving protected area management, reducing insect pest damage in forests, and creating healthy forest.
Carbon markets / carbon finance	Financial markets and instruments aimed at reducing greenhouse gas emissions through the trading of carbon credits, where one credit represents the right to emit a specific amount of carbon dioxide or the equivalent amount of a different greenhouse gas (may include REDD+ mechanisms)	Yes	Carbon finance	Mongolia has not started trading carbon yet, but there have been recent developments which indicate that the country is actively working to establish and participate in carbon markets, with a focus on leveraging its forestry sector for carbon sequestration and attracting international climate finance. The country is building partnerships, developing technical capacities, and aligning its efforts with international standards to create a carbon market framework.
Impact finance / impact investment (fund set up / sustainable forest funds / blended finance / de-risking)	Investments made with the intention to generate positive environmental and social impacts alongside a financial return, using strategies like fund setup, blended finance to mix different forms of private and public capital, and de-risking to reduce financial risk for investors.	No Reason: Lack of information		

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Table 3. Continued

Suggested FFSs	Short definition	Analysed (Yes/No)	Corresponding FFSs/ FFSs analysed	Short definition
			State and local government budget	The country has increased its budget for forest sector for the last few years. For instance, the budget for reforestation in 2022 was MNT0.3 billion, and was increased to MNT45.1 billion in 2024. However, the governance of the budget needs to be improved, for instance through implementation of performance based budgeting, and transparency and accountability.

3 STEP 1

COLLECTION OF INFORMATION ON EXISTING (EMERGING) FOREST FINANCE SOLUTIONS

3.1 Summary of Step 1

The first step focused on identifying currently implemented and potential major FFSs in Mongolia, as well as key stakeholders involved in forest finance. Key stakeholders were chosen in consultation with the EU Delegation in Mongolia, representing government organizations, NGOs, banking and finance institutions, private companies and international donor organizations. Stakeholders were initially contacted via email and then interviewed online and/or in person for 30-60 minutes. The interviews covered specific questions related to their roles in forest finance and general questions about national forest policy priorities, operational and emerging forest finance instruments, data sources, and alignment with global environmental agreements.

Through literature review, discussions and interview with stakeholders, we identified major FFSs in Mongolia. The country has initiated several FFSs in recent decades to address forest degradation, enhance reforestation, implement community-based sustainable forest management, and preserve ecosystem services. One example is within state and local government budgets. The 2024 forest sector budget is MNT116.5 billion (USD34.4 million), which is a significant increase from prior years, with a notable focus on re/afforestation efforts (MNT45.1 billion, equal to USD13.3 million). The government further supports the sector through tax exemptions on forestry equipment, greenhouse supplies and seedlings.

Several innovative funding initiatives have emerged to diversify financial support for forest conservation and

management. The Billion Tree Fund (BTF), established in 2022, collects contributions from the banking sector and had accumulated MNT10 billion by mid-2024, funding 49 small-scale forestry projects and planting 200,000 trees. Additionally, the Conservation Trust Fund (CTF), launched in 2024 in partnership with The Nature Conservancy, raised \$198 million as part of the 'Eternal Mongolia' initiative to support conservation, expand protected areas, and promote sustainable practices in forest communities.

The private sector has also contributed through the issuance of Khan Bank's Green Bond (KBGB), which raised USD60 million to finance projects in renewable energy, waste management and climate-smart agriculture; however, its work is not directed clearly towards the forest sector. Furthermore, public-private partnerships such as the Healthy Forest Project, funded by Rio Tinto Mongolia, target pest-vulnerable forest areas and promote healthy and sustainable forest management practices.

The Natural Resource Use Fee allocates (government-led instrument) funds collected from forest, water, and wildlife use toward restoration and conservation efforts, with 85% of forest-use fees directed toward forest restoration. But implementation of forest restoration with this instrument is rather limited given that not all of the 85% goes back to forest restoration: rather, local governments spend a significant portion of it on other local development projects and sectors.

Carbon financing is drawing much attention and raising hopes in the country, however it is still at an early stage of development and implementation.

Studies are currently being done on the topic, and carbon accounting methodologies are being developed by the World Bank and Asian Forest Cooperation Organization (AFOCO) joint team.

The Biodiversity Finance Initiative (BIOFIN), a UNDP-managed global programme, has further supported biodiversity conservation efforts by enhancing financial mechanisms and advocating for sustainable land management practices, including a livestock tax for herders. Ecotourism is suggested as supplementary to FFSs by stakeholders, however it doesn't make a direct contribution. According to a UN REDD report,¹² forest-based leisure tourism generates about USD39.7 million in the country. This can contribute to forest-based job creation and acts as an incentive to FUGs to increase their livelihood via participation in forest management, such as forest cleaning, and therefore have access to the forest for ecotourism. More comprehensive approaches are needed to incorporate biodiversity financing and ecotourism in forest financing mechanisms.

Despite these advancements, key challenges persist for FF instruments. The forest sector remains underfunded, with outdated technology and market limitations slowing economic growth. This is partly due to the lack of a proper legal framework for FF in the country. In addition, the slow rate of carbon accumulation in Mongolia's forests limits their role in climate change mitigation, although they hold promise for adaptation strategies. Establishing carbon finance opportunities is a priority. The Mongolian Law on Forests (2012) is currently under revision. Amendments to this law are currently being made to facilitate opportunities for new forest finance instruments, particularly in areas related to carbon markets, sustainable forest management and green economy initiatives.

3.2 Objective of Step 1

The objective of this step is to identify and document currently implemented and potential major FFSs in the country, and identify and interview the key stakeholders of forest finance solutions.

3.3 Stakeholder interview process

Key stakeholders were selected based on consultation with the EU Delegations in Mongolia. They include government organizations, non-government organizations, banking and finance organizations, international donor organizations and projects. The first correspondence was made through email, providing an introduction of our objective. Key personnel were interviewed online for 30-60 minutes; names and affiliations of the stakeholders are given in Annex 2. In addition to specific questions related to their roles in forest finance, the following general questions were asked:

- What priorities in your national forest policy and management needs still require additional funding? Please try to rank these policy and management priorities (up to three – which could include but are not limited to: sustainable forest management, forest and landscape restoration, community forestry, forest conservation, protected areas management, fire prevention and control, pest management, etc)
- What forest finance instruments are currently operational in Mongolia that contribute to financing these activities?
- If not yet operational, are you aware of emerging forest finance solutions (for example at the feasibility assessment level) that could contribute to addressing the above-described priorities? What enabling conditions would be necessary for them to succeed?
- Can you provide sources of literature and data for these forest finance solutions?
- Which stakeholders (government, NGOs, financial institutions) should we engage with to assess forest finance solutions?
- How do the identified forest finance solutions align with the goals of the Paris Agreement and the Global Biodiversity Framework?
- Can you provide data or case studies that highlight these impacts?

3.4 Forest finance solutions in Mongolia

In the last few decades, Mongolia has initiated several FFSs to sustainably manage its forest resource to prevent forest degradation, enhance re/afforestation, implement community-based sustainable forest management and preserve

¹² Forest sector financing and economic values in Mongolia. UN REDD. 2013.

ecosystem services. Based on the literature review and interviews with key personnel and experts, we found that the forest finance landscape is largely composed of the following instruments:

1. State and local government budget

Description and status: The main legal document governing forest resources in Mongolia, the Mongolian Law on Forest (2012),¹³ includes an article on funding (Article 46), but it only addresses funding related to forest fire prevention. Nevertheless, other sections of the law address forest funding. These sections outline the financial mechanisms and sources of funding to support forest restoration, re/afforestation, management, and sustainable use. The most relevant are:

- Section 7.4 states that the forest inventory expense will be funded by state, and local government budget, but if it is in the forests owned by Forest User Groups (FUGs) and enterprises the expense shall be paid by them, except the first year which will be paid by local budget.
- Section 32.4 states that the reforestation and forest restoration expense due to timber harvesting or pest damage shall be paid by logging entities and/or local budget.
- Section 39.6. states that the expenditures incurred by the state and local bodies in carrying out forest protection, restoration and afforestation activities and monitoring the implementation of the forest legislation, shall be financed from state and local government budgets.
- Section 39.7. states that funding for forest and steppe fire prevention activities shall be included in local government budgets.

There is a proposed amendment¹⁴ to this law underway, which has more specific statements on estimating forest carbon storage and forming the basis for participation in the international carbon market.

The allocation of natural resource use fees to local budgets is primarily governed by the Law on Reinvestment of Natural Resource Use Fees for the Protection of the Environment and the Restoration of Natural Resources (2000). Additionally,

the Environmental Protection Law of Mongolia stipulates that, unless otherwise provided by law, all revenue from fees and payments for the use of natural resources shall be allocated to local budgets.

As of 2024, the forest sector budget is MNT116.5 billion¹⁵ (USD34.4 million)¹⁶, of which MNT45.1 billion (USD13.3 million) is for re/afforestation (up from MNT0.3 billion in 2022). The main reasons for the expanded state budget are: (i) provision of ecosystem services, (ii) improving productivity for agriculture/pasture (dependence), and (iii) maintaining/expanding productive forest assets. The latter two aims could potentially, in the long term, increase fiscal revenues. In addition to increasing state and local government budget for forestry activities, the government is supporting the sector via tax policy. For instance, forestry equipment and machinery, greenhouses, fertilizers and pesticides imported and sold in the country are exempt from value-added tax. On the other hand, timber and wood products and some seeds and seedlings, are exempt from value-added and customs tax, which enhances competition for domestic products.

2. The Billion Tree Fund

Description and status: In the past, Mongolian policymakers have initiated a number of environmental policies, but these efforts are often disrupted by elections and changes in administration. As a result, green projects frequently lack the necessary funding. The most recent change is the newly formed Ministry of Environment and Climate Change, which brings hope for renewed interest in climate change at government level. Establishing innovative and sustainable forest finance solutions, securing external funding and engaging public advocacy could help ensure more stable and effective environmental initiatives. 'One billion trees' (launched by the President of Mongolia) is certainly one of the most ambitious initiatives to combat desertification, mitigate and adapt to climate change. Planting one billion trees will require extensive funding. So far, the Mongolian banking and finance sector has pledged to plant 88.6 million trees. Mongolbank and member organizations of Mongolian Bank Association established The Billion

13 Mongolian Law on Forests (2012). <https://legalinfo.mn/mn/detail/15624#:~:text=and%20Tenure%20Forests-,4.1.,authority%20of%20the%20Mongolian%20people.>

14 Personal communication with NFA.

15 20 October, 2024: 1 USD=3398 MNT

16 Presentation of NFA Director general B.Oyunsanaa, during Forestry summit on 4 March, 2024 (Ulaanbaatar, Mongolia).

Tree Fund¹⁷ (BTF) in 2022 to manage the funding from different sources. Currently, the BTF is primarily sourced from the banking sector, through donation and fundraising, collecting MNT30 from the commission of each low-value transactions between banks. As of July 2024, BTF accumulated MNT10 billion.¹⁸ BTF is an effort to diversify finance in the forestry sector, which previously was dominated by the state and local government budget, and international loans and aid. Since its establishment, BTF has funded selected small forestry projects in 2023 (34 projects) and 2024 (15 projects), organized capacity building trainings, and started international collaboration on technology transfer in forestry. As of March 2024, 200 000¹⁹ trees have been planted under BTF. The BTF has an executive board that consists of a consulting committee, technical committee, administrative unit and monitoring committee (independent). The funding projects are selected based on screening by forestry professionals as well as funding experts. In addition to funding activities directly related to tree planting, BTF is funding capacity building of foresters through advancement of technology, training of professionals, and raising public awareness on reforestation and restoration. These could help to generate revenue in the forest sector in the future.

3. The Conservation Trust Fund

Description and status: The Nature Conservancy Mongolia set its priority to develop a permanent financing mechanism for conservation activities. As such, the Government of Mongolia and the Nature Conservancy (TNC) launched the Conservation Trust Fund (CTF) in 2024, which is a part of the 'Eternal Mongolia' Project Finance for Permanence (PFP)²⁰ initiative. This CTF will manage donor funding and invest effectively in conservation priorities. The 'Eternal Mongolia' initiative has raised USD198 million from public, private and philanthropic donors, which will be spent on increasing protected areas in the country, strengthening the management effectiveness of protected area networks, and supporting sustainable and climate-resilient community-managed practices outside protected

areas. This will include protected areas and buffer zones in the forest areas, making it directly applicable to forestry activities and forest communities.

4. Khan Bank Green Bond

Description and status: The Khan Bank Green Bond (KBGB) Investment Project, launched in March 2024, is Mongolia's first green bond initiative.²¹ Developed with the assistance of the International Finance Corporation (IFC), the project aims to raise capital for financing projects that have a positive environmental impact, and to support Mongolia's transition to a green economy. The KBGB raised USD60 million, with contributions from IFC (USD15 million), the Dutch Entrepreneurial Development Bank (FMO) (USD35 million), and MicroVest Capital Management (USD10 million). The proceeds will be used to increase Khan Bank's lending to environmental projects, focusing on renewable energy, energy efficiency, waste management, and sustainable agriculture – including forestry (Figure 1).

5. Natural resource use fee

Description and status: According to the Mongolian Law on Natural Resource Use Fee (2012),²² the use of water, plants, forests, and wildlife incurs a fee collected by local governments and deposited into a dedicated local development fund. By imposing these natural resource use fees, Mongolia aims to balance economic development with environmental sustainability, ensuring responsible management of natural resources.

A certain percentage of the fund is allocated for the restoration, conservation and preservation of specific natural resources. Legally mandated percentages of fees collected are designated for environmental protection and restoration activities: a minimum of 15% from plant resources, 50% from wildlife, 15% from land, 85% from forests and 35% from water resources. This structured allocation supports sustainable practices and the protection of Mongolia's natural environment. In 2023, a total of MNT109 billion was collected from natural resource use fees (NRUF), of which about 80% is collected from water resource use fees. However, the local development funds are managed by local Citizens' Representative Committees (Khural), and therefore local administration is the main authority to

17 The Billion Tree Fund. <http://billiontree.mn/>

18 Personal communication with The Billion Tree Fund.

19 <https://ikon.mn/visualdata/xt/3371>

20 The Nature Conservancy. <https://www.tncmongolia.org/en/our-insights/news-and-stories/conservation-trust-fund-mongolia/>

21 Khan Bank Green Bond Introduction. https://www.khanbank.com/uploaded/static_files/documents/Green-bond-short-prospectus.pdf

22 Law on Natural Resource Use Fee. <https://legalinfo.mn/mn/detail?lawid=8663>

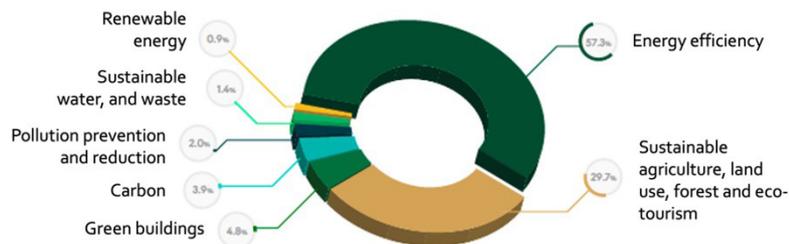


Figure 1. KBGB allocation

Source: Khan Bank green bond prospectus)

decide how the fund is spent. Priority is often given to other local development projects, and less than 26% of the fee collected from forestry activities are spent on forest restoration and protection. BIOFIN is working on improving this situation and ensuring a legally stated percentage of the NRUF is spent on the natural resource.

6. Public private partnership (biodiversity offsetting)

Mining companies operating in Mongolia have been implementing projects for biodiversity offsets, which serve as a mechanism for them to compensate for the ecological damage caused by mining operations. By investing in projects that restore or protect forests and other habitats, mining companies can create a sustainable funding source for forestry activities.

In Mongolia, biodiversity offsetting in the mining sector is not universally mandatory but is increasingly integrated into environmental policies and practices. The Environmental Impact Assessment (EIA) Law has been updated to incorporate the mitigation hierarchy, which includes steps to avoid, minimize, rehabilitate, and offset environmental impacts. This framework encourages mining companies to implement biodiversity offsets when adverse effects on ecosystems are unavoidable.

While not all mining projects are legally required to implement biodiversity offsets, there is a growing emphasis on their adoption. The government, in collaboration with organizations like The Nature Conservancy, has developed tools such as the Mitigation Design Tool to assist companies in identifying and protecting biodiversity-rich areas as part of their offsetting efforts.

In summary, while biodiversity offsetting is not uniformly mandatory across all mining operations in Mongolia, it

is becoming an integral component of environmental management within the sector, supported by evolving legislation and collaborative initiatives.

Rio Tinto case

Description and status: Rio Tinto, as a significant player in Mongolia's mining sector, has engaged in various initiatives to promote sustainable development and environmental stewardship. One such initiative is the Healthy Forest Project (HFP), which is a public-private partnership project by Ministry of Environment and Climate Change (MECC), Rio Tinto Mongolia and International Conservation Caucus Foundation (ICCF). The HFP will draw on international expertise to pilot and introduce new higher efficacy treatment techniques for controlling pests as well as build long-term national capacity to promote sustainable forest management, specifically focusing on insect pest outbreaks.²³ Rio Tinto Mongolia is investing MNT7.4 billion to support a forestry project aimed at treating 300,000 hectares of pest-vulnerable forest areas. The project will also enhance national capacity for forest protection through strengthened academic research, coordinated efforts among key institutions, the development of specialized training programs, and the sharing of best practices in sustainable forest management.

Example of Oyu Tolgoi mining site

Description and status: Since 2013, the Oyu Tolgoi mining project and operating company Rio Tinto has worked with the Wildlife Conservation Society to offset the impacts of its southern Gobi Desert copper mining operation in Mongolia.²⁴ This PPP aims to develop strategies for biodiversity conservation, conduct research and monitoring of ecological impacts, and engage local communities in sustainable practices and awareness efforts. Additionally, the partnership seeks

²³ Rio Tinto Mongolia. <https://www.riotinto.com/news/releases/2022/Healthy-Forest-Project-launched-to-protect-Mongolia-forests-for-future-generations>

²⁴ Wildlife conservation society. <https://measures.wcs.org/Metric-Details/m/12>

to implement best practices for resource management and influence policies that promote wildlife conservation and sustainable development. Through this collaboration, an extensive area populated with wild ass and gazelle is surveyed to track herd numbers, structures and habitats, including saxaul and elm groves within the desert area.

7. Carbon finance

Description and status: The Ministry of Environment and Climate Change is exploring carbon finance opportunities for Mongolia's forests, potentially providing additional funding for re/afforestation, forest restoration, conservation and management efforts. To establish a supportive legal framework for carbon trading, the National Forest Agency has prepared amendments to the Mongolian Law on Forests, which include sub-sections on carbon estimation of forest resources and the development of a carbon market. A baseline study conducted by the OLOLT Climate Change and Carbon Market Development Center has laid the groundwork, but further development is necessary to fully implement these initiatives. The Asian Forest Cooperation Organization (AFOCO) and the World Bank are starting a project in Mongolia to develop a carbon accounting system, but this is still in early stages and it is not clear if the accounting will be based on plantation or natural forest data. The outcome of this project will have tremendous significance if Mongolia wants to participate in the global carbon market.

8. Green development loans

Description and status: The European Investment Bank (EIB) has partnered with the Government of Mongolia to promote regional green development and sustainable forestry, marking a significant investment in Mongolia's infrastructure and environmental initiatives. Additionally, A Memorandum of Understanding was signed in March 2024 to support the EU-Mongolia Forest Partnership, which aims to preserve forests and promote sustainable forest management in alignment with Mongolia's 'One Billion Trees' initiative. This collaboration underscores a commitment to sustainable development and environmental resilience in Mongolia. The first tranche of the EIB loan could amount up to 100 million EUR while the EU would guarantee this loan with 9 million EUR.

The funding from the EIB will facilitate investments in sustainable forest management practices, particularly

through the EU-Mongolia Forest Partnership. In addition, through restoration of natural resources and ecosystem services it will help to create climate resilient ecosystems and communities.

9. The Biodiversity Finance Initiative

Description and status: The Biodiversity Finance Initiative (BIOFIN), a UNDP-managed global programme, has been working in Mongolia since 2015, focusing on the sustainable use and conservation of biodiversity through improved financial mechanisms and policy implementation.²⁵ BIOFIN supports the national biodiversity programme for 2015-2025, and has advocated for finance instruments to meet the gaps in financing needs for biodiversity conservation. Notable measures are being implemented to enhance the enforcement of the Law on Natural Resource Use Fees and the reintroduction of the pasture fee. Under the Mongolian Law on Livestock Tax (2020), herders are required to pay a tax of MNT2,000 per head of livestock. The revenue generated from this tax is allocated to the local development funds at the aimag and soum levels, which support projects aimed at improving pastureland and livestock productivity, establishing fodder reserves, protecting the environment, and conducting training and advocacy activities for herders. By imposing this livestock tax, the law incentivizes herders to limit the number of livestock they graze on pastureland, promoting more sustainable land management practices. Currently, BIOFIN is carrying out two activities that could directly contribute to forest finance in Mongolia:

- Improving the legal environment for the natural resource use fee
- Monitoring the success of BTNM activities.

10. Sustainable tourism/ecotourism:

Description and status: According to Mongolia's green taxonomy,²⁶ the ecotourism sector is the fastest-growing industry in the country. The development of ecotourism in rural areas will increase tourism revenue and improve the livelihood of rural communities. This alternative source of income for herders will be beneficial for sustainable management of natural resources, especially pasture and forest. An example

25 BIOFIN Mongolia. <https://www.biofin.org/mongolia>

26 Mongolian Green Taxonomy. 2019.

of such an effort is the 'Eternal Mongolia' PFP,²⁷ which aims to boost the green economy and support the growth of nature-based tourism. This initiative could provide sustainable financing for forest conservation while benefiting local communities through tourism tax and job creation. Another example is the ecotourism led by forest user groups, which can offer alternative sources of income to those living in the vicinity of forests,

therefore encouraging them to refrain from livestock grazing in these forest areas and the buffer zones of protected areas. Nature-based tourism in forest areas is often initiated by FUGs or local communities, and initial investments are mostly made from local savings and local NGOs. In 2023, about USD1 billion was generated from tourism, however no accurate estimate has been made of how much of this came from ecotourism.

27 The Nature Conservancy. 2024. <https://www.nature.org/en-us/newsroom/eternal-mongolia-pfp-announcement/>

4 STEP 2

ASSESSMENT OF FOREST FINANCE SOLUTIONS

4.1 Summary of Step 2

In the previous step, we included 10 FFSs, and based on the interviews and experts' opinions, we selected the following seven FFS for further analysis of their effectiveness and potential. The main criteria used for the assessment of these FFSs are: potential contribution to forest finance, contribution to biodiversity and climate goals, environmental sustainability and social sustainability. We found that the state and local government budget (incl. the natural resource use fee), the natural resource use fee, the Billion Tree Fund and carbon finance make a high contribution to forest finance, while the conservation trust fund and biodiversity offsetting make a medium contribution and the KBGB makes a low contribution to forest financing.

4.2 Objective of Step 2

The objective of this step is to evaluate the effectiveness and potential of each identified forest finance solution (up to seven) in terms of its financial impact, environmental and social sustainability and its contribution to biodiversity and climate goals.

4.3 Financial impact, environmental and social sustainability and contribution to biodiversity and climate goals of identified FFSs

11. State and local government budget

Potential impact on FF: The state and local government budget makes a high impact on FF, as

it is the main source of financing from government. The Government of Mongolia has pledged to spend 1% of country's GDP on the forest sector, which is a big increase on its previous allocation. This increase is largely due to BTNM, and therefore the major increase was in reforestation programmes. The following figure shows the last three years' budget for re/afforestation (Figure 2).

In 2024, the forest sector received an MNT116.5 billion budget, which came from several different sources, including state and local government budget as well as BTNM (Table 2).

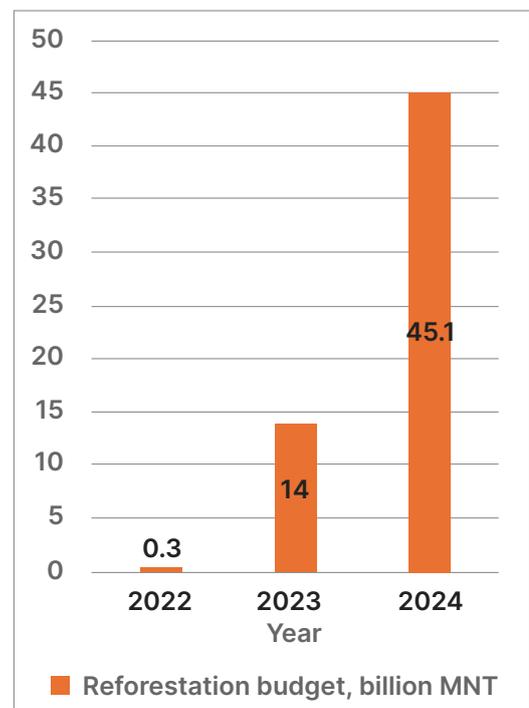


Figure 2. GoM re/afforestation budget for 2022-2024

Table 4. Forest sector budget allocation for 2024

Budget recipient	Funding source	Amount, billion MNT
Forestry organizations conducting re/afforestation and forest insect pest measures	BTNM	45.1
National Forest Agency	State budget	1.5
Inter-soum forest unit	Local budget	5.1
Department of environment and tourism in aimags		24.3
Environmental protection and restoration		40.5
TOTAL		116.5

Contribution to biodiversity and climate goals:

The State and local government budget makes a medium to high contribution to biodiversity and climate goals. Through supporting forestry activities, biodiversity benefits are achieved with increased ecosystem services and restored natural resources. Also, forestry activities are directly and indirectly contributing to the climate goals through greenhouse gas mitigation, and ecosystem restoration, as well as raising public engagement. According to the updated NDC of Mongolia,²⁸ the country aims to reduce greenhouse gas emissions by 22.7% by 2030 (compared to 2020), and this includes forestry activities. According to UN-REDD Mongolia²⁹, deforestation and forest degradation cause average net emissions of 3,477,384.20 tCO₂e per year; through implementing measures targeted to manage drivers, this can be reduced to 2,649,844 tCO₂e/yr by 2025 and increase GHG removal by 35%.

Environmental sustainability: Studies show that about 76% of the country's land is degraded,³⁰ and forestry activities will play a major role in reducing land degradation and desertification. Forest restoration will ensure continued and improved ecosystem services through protection of the soil and watershed. About 17% of the country's forest falls under protected zone category, and this includes areas under special protection, watersheds, ecologically vulnerable zones and green zones of urban spaces. Currently, about 21% of the country's land is classified as special protected areas,³¹ and Mongolia aims to increase this to 30% by 2030. Significant amount of this covers forest areas.

Social sustainability: The number of people working in the agriculture and forestry sector increased from 2900 to 3500 from 2020 to 2024.³² It is estimated that the forest and wood processing sector will need about 7000 extra employees by 2028.³³ This need is urgent as BTNM has already started. Increased employment in the forest and wood processing sector will play an important role in rural development through the creation of income and development of value chains.

12. The Billion Tree Fund

Potential impact: BTF is directly contributing to forestry activities, and therefore has a high level of impact on FF.

In 2023, the fund spent MNT1.3 billion on 34 selected projects across three areas: urban greeneries in public school and kindergarten (33% of the financing); re/afforestation, forest restoration and tree planting through public participation (56% of the financing); and public awareness raising and ecological education (11). This year, the funding will be given to projects in the following categories: sustainable forest and land use (grants, loans, investment), micro-projects (grants), and capacity building (incubators and scholarships).

A major challenge is monitoring the efficiency of the funding of many small-to-medium-sized projects. Also, monitoring of the survival rates of the planted trees, and ensuring post-planting treatment until trees are well established on the site, is still not very clear. This could affect the efficient use of funding. Hence, increasing private sector engagement and

28 Nationally Determined Contribution. <https://ndcpartnership.org/country/mng>

29 National Strategy and Action Plan for Reducing Emissions from Deforestation and Forest Degradation (REDD+): Mongolia. 2019

30 Mongolia Environmental Status report. Available: <https://forest.gov.mn/website/news.aspx?id=109>

31 <https://www.tncmongolia.org/en/our-priorities/protect-land-and-water/>

32 Statistics Bureau of Mongolia. https://www2.1212.mn/tables.aspx?tbl_id=DT_NSO_2600_014V3&Divisions_of_Establishments_select_all=0&Divisions_of_EstablishmentsSingleSelect=_2&Type_select_all=0&TypeSingleSelect=&YearQ_select_all=0&YearQSingleSelect=_202401_202301_202201_202101_202001&viewtype=table

33 Burmaa N. et al. Sustainable forest management: Current situation and certain challenges of the forest sector of Mongolia. 2021.

improving the efficiency of funding through monitoring and evaluation, and results-based financing, will further expand the financial resources in the fund. For instance, results-based financing could be implemented to incentivize re/afforestation projects.

Contribution to biodiversity and climate goals: BTF is allocated to various different activities in forestry, and many of these involve planting a few key species of trees. While this supports many ecosystem services, the contribution to biodiversity is limited. However, contribution to climate goals is high, through mitigation and adaptation activities. Mongolia's forest is dominated by coniferous trees, which are mostly distributed along the permafrost distribution, and restoring forest will help to preserving permafrost and vice versa.

Environmental sustainability: This year's BTF target funding for sustainable forest and land use activities, which will have significant impact on sand and soil stabilization, prevention of soil erosion, and many resulting activities. Currently, about 76% of Mongolia's land is affected by a degree of land degradation and/or desertification.

Social sustainability: BTF projects have increased public awareness about environmental sustainability. In 2023, through the implementation of micro projects, BTF created urban green space for 15352 children at primary schools and kindergartens. BTF also organized trips to different aimags for women in forestry to exchange knowledge and experiences.

13. The Conservation Trust Fund

Potential impact: Conservation Trust Fund (CTF) activities are largely directed towards biodiversity, and therefore their potential impact on FF is medium. However, there is increased interest from the Ministry of Environment and Climate Change in combining biodiversity and forestry tasks in management activities. This would help solve a major issue: conflict between sustainable forest management and special protected area management.

Proven CTF models from the RedLAC (Latin American and Caribbean Network of CTFs) and CAFE (Consortium of African Funds for the Environment) networks show the high potential of such mechanisms to significantly support forest conservation and restoration. Yet capitalization of CTFs is a challenge, despite the high potential of these mechanisms. There is a lack

of ODA resources flowing to the endowment of such CTFs, and a lack of national resources like fees and taxes flowing to these instruments.

Contribution to biodiversity and climate goals: The fund's contribution to biodiversity and climate goals is high, as proven by the types of activities financed by the many funds of the RedLAC and CAFE networks. Apart from direct targeted activities on biodiversity, there are many socio-economic benefits projected from CTF activities, which will have adaptation benefits.³⁴ One such activity planned by TNC Mongolia is to improve the livelihoods of herders in buffer zones, which will help to build communities' climate resilience.

Environmental sustainability: Mongolia aims to increase its protected area to 30% of its territory by 2030. CTF will provide funding for the protection and sustainable management of natural resources in areas of high biodiversity or high significance in ecosystem preservation. This will contribute to improving the management of protected areas, increasing the protected area network and preserving critical ecosystems.

Social sustainability: CTF activities will increase public awareness on biodiversity conservation and the preservation of ecosystems, and will enable mutual benefits and collaboration between protected area management and local communities. Buffer zone activities will help to improve the livelihoods of herders through rational use of natural resources, such as non-timber forest products, and diversifying economic activities away from food and fibre production from livestock. TNC will also ensure that the traditional knowledge of the herders is incorporated into sustainable pasture use practices.

14. Khan Bank Green Bond

Potential impact: Activities funded by KBGB are not directly related to forestry, which limits their relevance for forest finance. However, being the first green bond in the country, the initiative has high significance in terms of exploring further opportunities to implement green bonds. Incorporating orchards and tree nursery development using renewable energy as a source of

³⁴ <https://www.globallandscapesforum.org/publication/how-can-green-bonds-catalyse-investments-in-biodiversity-and-sustainable-land-use-projects/>

energy might be a way to use this bond in forestry-related activities. In addition, upon developing a value chain in forestry, the KBGB or a similar mechanism can be extended to include the forest industry. The main challenge is that most forestry activities take years to profit economically, and this makes it hard to apply for bond-supported activities. Given that PFEs have feasible business plans, they can access KBGB capital. However, FUGs are not able to apply for bank loans yet. One solution would be for FUGs to form a cooperative and then apply.

Nota Bene: Khan Bank's Green Bond issuance in this study is illustrative. Other green bonds have been issued by Golomt Bank and Trade and Development Bank (TDB).

Golomt Bank Green Bond: Issued in 2023, Golomt Bank's green bond was structured to finance renewable energy, energy efficiency, and green building projects. Similar to Khan Bank's issuance, it does not currently include forestry-specific investments but reflects a growing investor appetite for sustainable finance.

TDB Green Bond: Another major private-sector green bond was launched by TDB in 2023, aiming to support clean energy, waste management, and resource efficiency. While not directly linked to forestry, these instruments could serve as models for structuring a forestry-linked green bond in Mongolia.

Contribution to biodiversity and climate goals:

By using alternative sources of energy, the bond will preserve natural resources and cause less environmental pollution, thereby contributing significantly to biodiversity and climate goals, though not necessarily through forest activity support. Green bonds' overall contribution to biodiversity objectives is very limited (considering less than 3% of green bonds' proceeds flow to sustainable land use and biodiversity projects).

Environmental sustainability: KBGB targets funding for activities related to waste management, renewable energy and water resources. Mongolia has high potential for renewable energy because it has an average of 270 sunny days per year, and high wind and hydro-power resources. About 80% of Mongolia's water consumption comes from ground water, and 20% comes from surface water. The surface water resources are mainly fed from the glaciers and springs originated from forest areas.

Social sustainability: The green bond supports Mongolia's goal to increase green lending from 1.4% to 10% of all banking sector lending by 2030. Khan Bank provides services to more than 80% of the country's population and supports women business owners.

15. Natural resource use fee

Potential impact: Highly impactful on FF, as it will form a significant amount of funds to be spent back on forest restoration and reforestation. Earmarking of fees and taxes is often a key revenue source for domestic funds (such as Conservation Trust Funds). According to the Mongolian Law on Natural Resource Use Fees, which aims to channel revenues from natural resource use payments into environmental protection and natural resource rehabilitation, about 85% of the payments from forest resource use shall be spent back on forest restoration. According to UNDP,³⁵ successful enforcement and effective implementation of the law would generate an additional USD6 million per year for environmental protection. However, the regulation to use a certain percentage of the NRUF on natural resource management is not implemented well in practice. The local government decides on the final use of these fees, and often it goes to local development projects rather than on natural resource restoration. BIOFIN (Biodiversity Finance Initiative) Mongolia is working to increase the effectiveness of the NRUF law through revision of the regulations, establishment of a public database for environmental budgets and expenditures, and nationwide capacity building and awareness raising initiatives, etc. Initial results are visible through increased revenue (Figure 2).

Contribution to biodiversity and climate goals: The FFS' contribution to biodiversity is high, and restoration of natural resources will significantly contribute to climate goals. BIOFIN sees it as one of the major solutions to biodiversity funding, and is therefore working towards making it more efficient through better regulation, transparent budget and expenditure. Exact contributions to biodiversity and climate goals also depend on to which funding instruments such a source is allocated (Conservation Trust Fund, local budget on forest, etc).

Environmental sustainability: According to the

35 <https://www.undp.org/mongolia/blog/improved-implementation-mongolian-law-natural-resources-use-payment-has-tripled-countrys-environmental-expenditure#:~:text=One%20of%20the%20most%20important,protection%20and%20natural%20resource%20rehabilitation.>

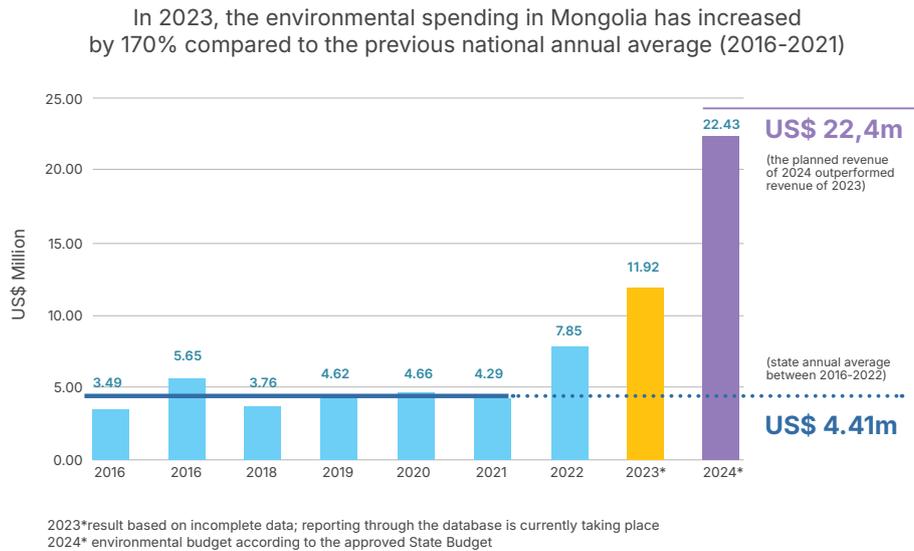


Figure 3. NRUF revenue (Source: UNDP Mongolia)

Mongolian law on NRUF, about 15, 50, 15, 85 and 35 percent of the revenue generated from natural resource use fees shall be spent back on the restoration of plant, wildlife, land, forest and water resources respectively. Successful implementation of this law will have tremendous impact on the environmental sustainability.

Social sustainability: Efficient use of NRUF will be supported by improved public awareness, and increased capacity building, including rangers and ecological police. This will also improve the accountability of natural resource users.

16. Public private partnerships (biodiversity offsetting)

Potential impact: Highly impactful, as biodiversity offsetting through PPP contributes to forest restoration and sustainable forest management. As per the BTNM, 21 mining companies pledged to plant 608 million trees³⁶ to meet the biodiversity offset requirement. Many companies are partnering with the public sector on this mission. With the recent development of PPP law in Mongolia, the partnership is promising potential positive outcomes. Currently, the largest of the mining companies in the country are participating, including Oyu Tolgoi, Rio Tinto, Energy Resource, Erdenet, etc. As their initial success becomes visible, more mining companies may

join. The partnership is projected to operate not only in reforestation and forest restoration, but also in the wood processing industries to support sustainable forest management. Wood processing industries are an integral part of sustainable forest management and offer a faster return of economic benefits. They are also mandated to plan trees/restore forests after harvesting. Biodiversity offsets through PPP are also potential sources for other mechanisms like the Conservation Trust Fund and/or the One Billion Trees Fund.

Contribution to biodiversity and climate goals:

Biodiversity offsetting through PPP significantly contributes to biodiversity and climate goals through restoration and sustainable management of forests and ecosystems. However, direct impact will be visible in the longer term, as the activities will take a longer time to benefit biodiversity and climate goals (except adaptation benefits). In particular, offset mechanisms can generate significant resources for forest and ecosystem restoration if a stringent mitigation hierarchy is applied (avoiding, reducing, compensating).

Environmental sustainability: Biodiversity offsetting will contribute to mitigating environmental damage from mining-related activities. In Mongolia, about 49% of land degradation is directly related to anthropogenic factors, and pasture use and mining are the leading factors. Therefore, biodiversity offsetting by mining companies will significantly contribute to ecosystem restoration.

36 <https://terbummod.mn/posts/4>

Social sustainability: Biodiversity offsetting might affect local people through limiting access to restored ecosystem. Public awareness-raising and ensuring stakeholder participation in the planning of offset activities will improve this situation.

17. Carbon finance:

Potential impact: Carbon financing will have a direct impact on FF as it will allow for the trading of voluntary (and compliance once the mechanism is established in the country) carbon credits. However, the forest carbon market in Mongolia is in its inception stage. In April 2024, the Mongolia Forest Carbon Program³⁷ was launched. The programme is a carbon-focused voluntary market mechanism developed by the OLOLT center with the support of the US government. It is applicable to afforestation, reforestation and agroforestry projects. At the moment, it only mentions voluntary markets, but some recent developments, such as an MoU between the Mitsubishi Corporation and the Ministry of Environment and Tourism of Mongolia (June 2024³⁸) under Japan's JCM aims to target both voluntary and compliance markets.

However, proper carbon accounting mechanisms need to be improved for credit estimation. There are existing equations for volume and biomass estimation of the

main tree species in the country, which can be used as a basis for further development of a methodology. Studies on plantation forests need to be expanded. Also, it should be noted that the slow growth of forest and forest degradation due to lack of SFM make carbon accounting challenging.

Contribution to biodiversity and climate goals:

Through generating economic incentives, this FFS will motivate restoration and improved forest management, which will significantly contribute to biodiversity and climate goals.

Environmental sustainability: Re/afforestation and agroforestry projects will contribute to improved environmental conditions through the prevention of ecosystem degradation, and ecosystem restoration.

Social sustainability: Carbon projects will prioritize local communities and their benefits. Also, they will provide economic opportunities to rural people, and agroforestry in the longer run will create income from production as well. The voluntary carbon market will also offer opportunities to local communities to participate in offset projects by larger companies.

The assessment of FF solutions is summarized below in Table 5.

³⁷ <https://www.cccmdc.mn/carbon-market>

³⁸ <https://carbonherald.com/boomitra-mongolian-govt-sign-mou-on-regenerative-agriculture-and-carbon-finance/>

Table 5. Summary table of FF solutions assessment

	1	2	3	4	5	6	7
FF solution	State and local government budget	The Conservation Trust Fund	Natural resource use fee	Public private partnership	The Billion Tree Fund	Carbon finance/market development	Khan Bank Green Bond
Financial potential	3	2	3	2	3	3	1
Value chains development contribution	2	2	2	1	1	2	3
Contribution to biodiversity goals	3	3	3	3	1	1	1
Contribution to climate goals	3	2	3	3	3	3	3
Other environmental considerations	2	3	3	3	3	2	2
Social considerations, incl. for IPLC groups	2	3	1	2	2	2	2
Key enabling environment elements	Mongolian Law on Forests Mongolian Law on budget	Mongolian Law on Protected areas	Mongolian Law on Natural resource use fee	Mongolian Law on PPP, Responsible mining regulations	Billion Tree National Movement	Mongolian Carbon Finance Program	Green bond initiative Sustainable development goals
Quantitative evaluation*	15	15	15	14	13	13	12
Ranking	I	I	I	II	III	III	IV

* Scores have been assigned to the qualitative evaluation. Score is given based on the impact: 3-high, 2-medium and 1-low. Sum of the scores is calculated and the highest sum shows the highest priority in the ranking.

5 STEP 3

PRIORITIZATION OF FOREST FINANCE SOLUTIONS

5.1 Summary of Step 3

Based on the analysis of FFSs listed in Step 2, we have conducted a final ranking based on potential contributions to forest financing, biodiversity and climate goals, and environmental and social sustainability.

Based on the final ranking, we prioritize the following FFSs, which have the most potential to contribute directly into forest sector financing, with benefits to biodiversity and climate goals. These are:

- State budget and local budget
- Natural resource use fee
- The Conservation Trust Fund (Public funds)
- PPP (Biodiversity offsetting)

State and local government budget has been the most consistent source of funding regulated by government over decades. Although there are caveats, such as dependence on local government to allocate the budget, this is still the main source of budget in forestry. Local budget comes largely from the NRUF, but the spending figures on forest have been inconsistent, and not meeting the stated 85%. This can be improved through policy intervention, and BIOFIN is in the process of improving the NRUF system. PPPs will help mobilize additional financial resources for the forest sector, which is currently highly dependent on public finance. One main form of PPP in Mongolia is biodiversity offsetting by the large mining companies, who pledged to plant millions of trees under BTNM.

In addition, the EU-Mongolia Forest Partnership is initiated, and it aims to leverage financing from various sources, including international and national businesses (including PPP), to support sustainable forest management, conservation and restoration.

While Mongolia's forestry sector is making developments with increased state and private funding, ongoing challenges related to financial sustainability, policy stability, and market access must be addressed to ensure the sector's long-term success.

5.2 Objective of Step 3

The objective of this step was to identify the most promising forest finance solutions based on their financial potential and their contributions to climate and biodiversity goals, and to identify the EU relevance on the specific finance solution.

5.3 Final ranking of the FFSs in Mongolia

Based on the interviews, review material and discussion among core experts, we ranked the forest finance solutions in Mongolia and selected the four with the most potential or support from the government side (details of the scoring for the ranking is provided in Step 2). The brief description and relevance for EU of the specific solution is given below for the four highest-ranked FFSs (Table 6).

Table 6. Selected FFS and EU relevance of the specific solutions

No	FFS	Description	EU relevance
1	State budget and local budget	As of 2024, forest sector budget is MNT116.5 billion, ^c of which MNT45.1 billion is for re/afforestation (was MNT0.3 billion in 2022). In addition to increasing state and local government budget for forestry activities, government is supporting the sector via tax policy. Also, 1% of GDP will be spent on forestry sector.	It is a budget from government and EU cannot relate directly. However, EU can contribute to improving budget governance through improving regulations, monitoring and evaluation of efficient use of the budget. As of 2024, there are EU-funded projects on improving budget governance with World Bank, UNDP, OECD and UNICEF are being implemented. Also, capacity building of forestry officials, and awareness raising amongst public, including local Citizens' Representative Committee (Khural) will help in ensuring efficient use of budget on forestry activities.
2	Natural resource use fee	According to the Mongolian Law on Natural Resource Use Fee (2012), the use of water, plants, forests, and wildlife incurs a fee collected by local governments and deposited into a dedicated fund. Minimum of 85% of the forest resource use fee is mandated to be spent on the forest protection, re/afforestation and restoration. In 2023, about USD32 million was collected through NRUF.	BIOFIN, initiated by UNDP and the European Commission, has been operating in Mongolia since 2015, and have done many activities in biodiversity conservation. Recently, BIOFIN is actively working towards ensuring a mechanism to use NRUF in the designated natural resource restoration. EU can further improve the monitoring and evaluation of the efficiency of the use of NRUF on forest restoration and re/afforestation.
3	The Conservation Trust Fund (Public funds)	The Government of Mongolia and the Nature Conservancy (TNC) launched the Conservation Trust Fund (CTF) in 2024, which is a part of 'Eternal Mongolia' Project Finance for Permanence (PFP) initiative. This CTF will manage donor funding and invest effectively in conservation priorities. 'Eternal Mongolia' initiative has raised USD198 million.	EU can facilitate knowledge sharing and capacity building by leveraging its expertise in sustainable forest management and conservation finance. Also, EU can engage in joint projects in collaboration with TNC for improving forest governance and management of protected areas with forests.
4	Public private partnership/ biodiversity offsetting	Rio Tinto case: Rio Tinto Mongolia is investing MNT7.4 billion in a public private partnership project aimed at treating 300,000 hectares of pest-vulnerable forest areas, and strengthening capacity building. Oyu Tolgoi case: Since 2013, the Oyu Tolgoi mining company worked with the Wildlife Conservation Society to offset the impacts of its southern Gobi Desert mining operation in Mongolia. This PPP aims to develop strategies for biodiversity conservation, conduct research and monitoring of ecological impacts, and engage local communities in sustainable practices and awareness efforts.	EU can relate through the implementation of the EU forest partnership on forest value chain development and sustainable forest management. According to factsheet 'FOREST PARTNERSHIPS WITH THE EUROPEAN UNION-Mongolia', the forest sector directly and indirectly creates about 80,000 jobs. The exact number is questionable, yet the contribution in rural development and income generation through value chain development will benefit forestry sector, as well as the rural economy and society.

5.4 Stakeholder meeting

Results from the draft report was shared and discussed among selected stakeholders (10 stakeholders were invited) during an online meeting on 21 November, 2024 (14.00-15.30). The meeting was hosted by EUD Mongolia and attended by representatives from the NFA, international projects, and expert team members involved in the assessment. The agenda of the meeting is given in Annex 3. The primary objective of this assessment was to test the assessment methodology, and therefore the methodology was explained in detail by the expert team to the audience, followed by presentation (Annex 4) of assessment results and key findings. Discussion was led by the following key questions:

- Feedback and comments on the assessment and ranking?

- What can be done to overcome data availability challenges, including on the role of FF solutions to contribute to climate and biodiversity targets?
- How can FF solutions be more coordinated in the future? To avoid overlaps in mandate and ensure financing gaps are covered by relevant solutions? Which coordination efforts does it require? With which institutional arrangements? How can you leverage the excellent partnership between the EU and Mongolia
- What are priority support areas which technical and financial partners should engage in?
- EIB loan: how can it support the development of the forest finance landscape in Mongolia?
- How will it stimulate forest production so that Mongolia can pay back the loan?

The discussion outcomes are summarized in the conclusion and recommendation section.

CONCLUSIONS AND RECOMMENDATIONS

During the assessment, several forest finance solutions were proposed for analysis, however it was beyond the scope of this study to pursue all the solutions mentioned during the interviews. Therefore, we selected those most emphasized by the stakeholders, with most potential to contribute to FF, or with highest sustainability potential.

The first two steps involved more open discussion and review to explore the magnitude of the contribution in FF for each solution. Initially 10 finance solutions were suggested, but only seven of these were further analyzed for Step 2. During this step, scoring was assigned to each FFS based on the criteria specified in the inception report. During the 3rd step, final ranking of the instruments was done based on the findings from the scoring in the Step 2. The ranking was done quantitatively. Highlighting points of these selected FFSs are given below.

State budget and local budget:

- As of 2024, forest sector budget is MNT116.5 billion (USD34.4 million), which is a significant increase compared to previous years.
- GoM is demonstrating strong commitment to the forestry sector by allocating 1% of GDP to forestry activities and supporting the sector through favourable tax policies.
- While EU cannot directly contribute to Mongolia's government budget, there are opportunities for indirect support through improving budget governance, regulations, and monitoring systems
- EU can contribute significantly by providing capacity building programmes for forestry officials and raising awareness among the public and local Citizens' Representative Committees (Khurals) to ensure efficient use of the forestry budget.

Natural resource use fee:

- The Mongolian Law on Natural Resource Use Fee (2012) establishes fees for the use of water, plants, forests and wildlife resources.
- In 2023, about USD32 million was collected through NRUF.
- According to the law, a minimum of 85% of the forest resource use fee is mandated to be spent on forest protection, reforestation, and restoration activities.
- BIOFIN is actively working to ensure that Natural Resource Use Fees (NRUF) are effectively used for natural resource restoration. BIOFIN is reviewing NRUF Law.
- The EU can further contribute by improving the monitoring and evaluation systems for the efficient use of NRUF, particularly in forest restoration and reforestation projects

The Conservation Trust Fund (Public funds)

- In 2024, the Government of Mongolia and The Nature Conservancy (TNC) established the Conservation Trust Fund as part of the 'Eternal Mongolia' PFP initiative.
- The 'Eternal Mongolia' initiative has successfully raised USD198 million for conservation efforts in Mongolia.
- The 'Eternal Mongolia' initiative utilizes the PFP model, which aims to ensure lasting conservation by working with the entire system of conservation areas and involving local communities and governments as partners.
- The EU can facilitate knowledge sharing and capacity building by leveraging its expertise in sustainable forest management and conservation finance.

- There is potential for EU engagement in joint projects with TNC to improve forest governance and management of protected areas with forests.

Public Private Partnership/biodiversity offsetting

- Rio Tinto Mongolia is investing MNT7.4 billion in a PPP project aimed at treating 300,000 hectares of pest-vulnerable forest areas and strengthening capacity building.
- Since 2013, Oyu Tolgoi has partnered with the Wildlife Conservation Society to offset the impacts of its mining operations in the south Gobi through developing biodiversity conservation strategies, conducting research and monitoring ecological impacts, and engaging local communities in sustainable practices and awareness efforts.
- The EU can contribute through its forest partnership programme, focusing on forest value chain development and sustainable forest management in Mongolia.
- EU involvement in value chain development could significantly benefit the forestry sector, rural economy, and society by generating income and promoting sustainable practices.

Based on the assessment results and stakeholder discussions, the following major key takeaways and recommendations can be drawn regarding forest financing in Mongolia. These are:

1. Mongolia has diverse public, private, domestic and international financing solutions available for

its forest sector. This diversity provides a strong foundation for supporting sustainable forest management and conservation efforts. In order to facilitate the effective use of these existing and potentially emerging FFSs, providing a proper legal framework for forest finance governance is urgently needed.

2. There are numerous existing financing mechanisms with significant potential that require support for scaling up, for instance green bonds, NRUF, CTF, and green loans. The important point to consider is that the return on investments is likely to be highest when focusing on scaling up and improving coordination between existing solutions, rather than introducing and developing new ones.
3. While this quick scan assessment provided valuable insights, a more comprehensive analysis is necessary to fully understand the complexity and opportunities within Mongolia's forest finance landscape. This in-depth study would help to identify funding gaps in the forest sector, assess the effectiveness of current financing flows, and develop strategies to increase the policy and budgetary priority of the sector.
4. Data availability challenges can be addressed through improving data transparency in forestry. Creating a shared database of ongoing and planned forestry projects will be enormously helpful in preventing overlaps and facilitating the filling of gaps. Combined with the NFA resources, this can help in monitoring the effectiveness of different forestry activities.

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ANNEXES

Annex 1. List of major studies related to financing in forest (natural resource) sector of Mongolia

No	Name of the study	Author/organization	Year
1	Forest sector financing flows and economic values in Mongolia	UN REDD	2013
2	Strengthening Carbon Financing for Regional Grassland Management in Northeast Asia	ADB	2015
3	Proposed methodology & Institutional mechanisms to determine pasture use fees	BIOFIN	2017
4	Proposed methodology & institutional mechanisms to determine pasture use fees	BIOFIN	2017
5	Assessment of Financing Mechanisms and Options for Mongolia's REDD + Action Plan	UN REDD	2018
6	National Strategy and Action Plan for Reducing Emissions from Deforestation and Forest Degradation (REDD+)	UN REDD	2018
7	Mongolian Green Taxonomy	MSFA	2019
8	Study on international practices and the potential of setting ecosystem service fee in green areas, water body and its' protected area in Mongolia	UN ESCAP	2019
9	Biodiversity Finance Plan: Financial Solutions for Filling the Gaps in Financing National Biodiversity Strategic Action Plan	BIOFIN	2019
10	Green bond framework	Khan Bank	2022
11	Billion tree fund: Annual report	Billion Tree Fund	2022
12	Billion tree fund: Annual report (in Mon)	Billion Tree Fund	2023
13	Green Bond Introduction	Khan Bank	2023
14	FAST Report on Khan Bank green bond investment project	ADB	2024

Annex 2. List of key personnels interviewed

No	Name	Position	Organization	Email	Status	Interview date, time (ULAT)
1	Solongo Ts.	Project officer	GIZ Stream	tsevegmid.solongo@giz.de	Interviewed	18 July, 13.00-14.00
2	Michael Trockenbrodt	Project leader	GIZ Stream	michael.trockenbrodt@giz.de	Interviewed	18 July, 13.00-14.00
3	Tuvshinjargal G.	Project founder Rio Tinto	"Healthy forest"	tuvshu1@gmail.com	Interviewed	19 July, 19.00-19.30
4	Saranchimeg N.	Partnership and External relations manager	Billion Tree Fund	saranchimeg@billiontree.mn	Interviewed	19 July, 16.00-17.00
5	Batzaya Ts.	Project coordinator	Billion Tree Fund	batzaya@billiontree.mn	Interviewed	19 July, 16.00-17.00
6	Nomindari E.	CEO	Mongolian Sustainable Finance Association	nomindari@toc.mn	Interviewed	19 July, 15.00-16.00
7	Yanjinkham G.	Project officer	Mongolian Sustainable Finance Association	yanjinkham@toc.mn	Interviewed	19 July, 15.00-16.00
8	Oyunsanaa B.	General director	National forest agency	oyunsanaa@forest.gov.mn	Interviewed	23 July, 18.30-19.30
9	Chuluunkhuu Baatar	CEO	OLOLT carbon credit center	baataarc@gmail.com	Interviewed	1 August, 13.00-14.00
10	Galbadrakh Davaa	Conservation trust fund	TNC Mongolia	gdavaa@tnc.org	Interviewed	2 August, 13.00-14.00
11	Erdenedelger B.	First deputy CEO	Khan Bank	erdedelger.b@khanbank.com	Interviewed	8 August, 13.00-14.00
12	Suvd B.	Senior Manager	Khan Bank, Green finance program	suvd.b@khanbank.com	Interviewed	8 August, 13.00-14.00
13	Ariuntuya D.	Senior officer	Ministry of Environment and Climate Change	ariuntuya@met.gov.mn	Interviewed	18 September, 18.00-18.30
14	Arnaud Pierre Appriou	Programme Manager	EUD in Mongolia	Arnaud-Pierre.APPRIOU@eeas.europa.eu	Interviewed	18 September, 18.00-18.30

continued on next page

Annex 2. Continued

No	Name	Position	Organization	Email	Status	Interview date, time (ULAT)
15	Batkhuu N.	Adviser to the President of Mongolia	Office of the President	batkhuu@president.mn	Interviewed	20 September, 9.00-9.30
16	Dolgorsuren S.	Coordinator	FAO "Value chain and forest governance" project	Dolgorsuren.Sanjjav@fao.org	Interviewed	3 October, 9.00-10.00
17	Erica Pohnan	Forest value chain specialist	FAO	Erica.Pohnan@fao.org	Interviewed	3 October, 9.00-10.00
18	Wojtek Dubelaar	Forestry Officer / Value chain and business development specialist	FAO	Wojciech.Dubelaar@fao.org	Interviewed	3 October, 9.00-10.00
19	Tserennyam L.	National coordinator	BIOFIN Mongolia	tserennyam.lundaa@undp.org	Interviewed	3 October, 15.00-16.00

Annex 3. Agenda of stakeholder validation meeting/workshop

Stakeholders meeting	21.11.2024	15.00 – 16.30
Opening words	Patrice Moussy (INTPA)	5 min
Presentation of work methodology	Anja Gassner (CIFOR-ICRAF)	5 min
Presentation of assessment results and key findings	Delgerjargal Dugarjav	20 min
Questions and answers		15 min
Introduction of key questions for discussion	Delgerjargal Dugarjav and Anja Gassner	5 min
Moderated discussion	Delgerjargal Dugarjav and Anja Gassner	30 min
Possible next steps and closing	INTPA and EUD	10 min

Annex 4. Presentation of assessment results and key findings

FOREST FINANCE COUNTRY ASSESSMENT in MONGOLIA

Stakeholders' meeting 21.11.2024

Delgerjargal Dugarjav

1

Outline

- Introduction
- Step 1 - Mapping of Forest Finance Solutions
- Step 2 - Assessment of selected Forest Finance Solutions
- Step 3 - Prioritization of Forest Finance Solutions
- Summary and Key take-aways

2

Introduction

3

FF country assessment's objectives

- To get an understanding of available forest finance solutions that are supporting climate and biodiversity objectives.
- To initiate an evidence-based approach to prioritize solutions with the most financial and sustainability potential.
- To foster a dialogue on scaling relevant forest finance solutions.

Nota Bene.

- FF country assessment is not a comprehensive FF solutions review for Mongolia
- The assessment process has been a quick scan to inform the EC and their partners on the current status of FF solutions and do not attempt to present a pathway for Mongolia

4

Assessment methodology – 3 steps

Step 1: Collection of information on existing FF solutions (both already operational and emerging/nascent solutions)

- Stakeholders consultation
- Map forest finance solutions
- Select a long list of up to 7 forest finance solutions that will be further assessed

Step 2: Assessment of forest finance solutions (up to 7)

For each FF solution identified, conduct an assessment based on following criteria:

- Financial potential
- Biodiversity and Climate goals
- other environmental benefits and social impacts, incl. for gender and IPLC groups
- Enabling environment and stakeholders engagement

Step 3: Prioritization of forest finance solutions

- Develop a scoring system to rank solutions based on the criteria above
- Present and discuss scoring results in a multistakeholders meeting

July-October 2024

5

Diversity of FF solutions considered

- Recognizing diversity of FF solutions: domestic, international, public and private
- Based on stakeholders' interviews, FF solutions have been selected for the analysis
- A comprehensive review of FF solutions was outside scope

National Forest Funds / Conservation Trust Funds	Green Bonds / Sustainability-linked Loans
Environmental fiscal reform / Green budgeting	Payments for (Forest) Ecosystem Services / Incentives Schemes
Carbon Markets / Carbon Finance	Finance Instruments for value chains that support conservation and restoration of forests
Biodiversity Markets (Biodiversity Credits/Certificates)	Impact Finance / Impact Investment (Fund Set Up – Sustainable Forest Funds / Blended Finance / De-risking)

6

Stakeholders' meeting objectives

- Present draft assessment results and collect feedback and comments from stakeholders
- Trigger discussions on key FF solutions for Mongolia
- Contribute to build a shared vision on key forest finance priorities




7

STEP 1 – Mapping of Forest Finance Solutions




8

FF solutions mapping approach

- Desk review of available material
- Key stakeholders - selected based on the consultation with EU Delegations in Mongolia
- The first correspondence was made through email
- Interviews: online/in person for 30-60 minutes
- Key questions: Priorities, forest finance instruments, sources of literature, data, case
- Key Stakeholders: MECC, NFA, BTF, SFA, GIZ Stream, OLOLT, TNC, Khan bank, FAO, BIOFIN

Stakeholder	Role	Interview Date	Key Findings
MECC	Ministry of Environment and Climate Change	2024-01-15	Policy framework, funding sources
NFA	National Forestry Agency	2024-01-20	Operational challenges, equipment needs
BTF	Billion Tree Fund	2024-02-05	Project implementation, community engagement
SFA	State Forestry Agency	2024-02-10	Forest management practices, sustainability
GIZ Stream	German Development Cooperation	2024-02-15	Technical assistance, capacity building
OLOLT	Local Government	2024-02-20	Local needs, community forestry
TNC	The Nature Conservancy	2024-03-05	Conservation strategies, protected areas
Khan Bank	Financial Institution	2024-03-10	Green financing, investment opportunities
FAO	World Food Programme	2024-03-15	Agroforestry, livelihoods integration
BIOFIN	Biodiversity Finance Initiative	2024-03-20	Biodiversity conservation, ecosystem services



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FF solutions considered at mapping phase

- 1) State and local budget
- 2) The Billion tree fund
- 3) The Conservation trust fund
- 4) Khan Bank Green bond
- 5) Natural resource use fee
- 6) PPP (biodiversity offsetting)
- 7) Carbon finance
- 8) Green development loans (EIB)
- 9) The Biodiversity finance initiative
- 10) Sustainable/eco-tourism



10

Overview of FF solutions

- State and local government budget for the forest sector in 2024 is about \$34.4 million, and the government provides tax exemptions on forestry equipment, greenhouse supplies, and seedlings
- BTF, established in 2022, has accumulated about \$3 million by mid-2024, funding 49 small-scale forestry projects and planting 200,000 trees
- CTF, launched in 2024 in partnership with The Nature Conservancy, raised \$198 million for conservation, expanding protected areas, and promoting sustainable practices in forest communities
- Green bonds: KBGB raised \$60 million for projects in renewable energy, waste management, and climate-smart agriculture, including re/afforestation and sustainable forest management
- PPP/Biodiversity offsets: The Healthy Forest Project, funded by Rio Tinto Mongolia, targets pest-vulnerable forest areas and promotes sustainable forest management practices



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Overview of FFSs continued

- Natural Resource Use Fee allocates 85% of forest-use fees toward forest restoration, but implementation has been inefficient, some recent improvement
- Carbon financing in Mongolia is in early stages of development, with studies and carbon accounting methodologies being developed by the World Bank and AFOCO, + JCM by Japan
- Green development loans: The European Investment Bank is investing \$57.3 million, including a \$10 million EU grant, in Mongolia's Aimag and Soum Centres Green and Resilient Regional Development Investment Programme, however the forest sector is very much diluted among other sectors in this public loan.
- BIOFIN supports biodiversity conservation efforts and advocates for sustainable land management practices + NRUF Law update
- Eco-tourism generates about \$39.7 million in forest-based leisure tourism, contributing to forest-based job creation and incentivizing Forest User Groups (FUGs) participation in forest management



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EIB loan

- EIB loan will support Mongolia forest sector in the context of the EU Forest Partnership. It will help the country to better preserve existing forests and facilitate the development of a sustainable and inclusive economy and society under sound forest management that takes into account the needs of the local communities.
- EIB loan could possibly serve some FF solutions through cofinancing, supporting the enabling environment, among possible supports.
- Questions for discussion:**
 - How can the EIB loan be beneficial to unleash the potential of key FF solutions (in particular domestic solutions) ?
 - What does the Mongolian government need to assure that this opportunity contributes to long-term sustainable forest finance and deliver social and environmental impacts?

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GENERAL ISSUES AND GAPS OBSERVED			
	Monitoring and Evaluation	Data transparency	Inclusivity of Financing Solutions
Gaps	Lack of monitoring of outcome and effectiveness of FFSS	Lack of transparent, accessible data systems for stakeholders	Limited attention is given to expand the access to FF for rural communities, women and small businesses
Proposed measures	<ul style="list-style-type: none"> Tracking the effectiveness of funds used in re/afforestation and forest restoration activities Accounting survival rate of seedlings 	<ul style="list-style-type: none"> Open database/public database for existing reports, data, inventory Support from NFA to provide access to stakeholders for open e-library 	<ul style="list-style-type: none"> Access to FF by Forest user groups needs to be expanded Gender strategy for environmental sector needs to be adopted to forest sector

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STEP 2 - Assessment of selected Forest Finance Solutions



15

1. State and local budget

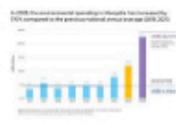
Financial contribution to forestry	Contribution to biodiversity and climate goal	Environmental sustainability	Social sustainability
<ul style="list-style-type: none"> as of 2024, forest sector budget is 136.5 billion MNT (34.4 USD) main source of financing from government 1 % of country's GDP on forest sector 	<ul style="list-style-type: none"> Increased ecosystem service and restored natural resources greenhouse gas mitigation, and ecosystem restoration, raising public awareness and engagement 	<ul style="list-style-type: none"> continued and improved ecosystem services through protection of soil, and watershed some forestry activities (logging, fire prevention etc.) can have unfavorable effect on environment 	<ul style="list-style-type: none"> number of people working in agriculture and forestry sector increased from 2900 to 3500 in 2020 to 2024. forest and wood processing sector will need about 7000 people lack of inclusive policy
high	high	medium	medium




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2. Natural resource use fee

Financial contribution to forestry	Contribution to biodiversity and climate goal	Environmental sustainability	Social sustainability
<ul style="list-style-type: none"> In 2023, about 32 million USD was collected through NRSF. about 85% of the payments from forest resource 	<ul style="list-style-type: none"> restoration of natural resource BIOFIN sees it as one of the major solutions to biodiversity funding 	<ul style="list-style-type: none"> about 15, 50, 15, 85 and 35 percent of the revenue generated is – local government fund spent back on the restoration of plant, wildlife, land, forest and water resources 	<ul style="list-style-type: none"> Improved public awareness, and increased capacity building, including rangers and ecological police. Improve the accountability of natural resource users. targeted use for locals
high	medium	high	medium




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3. The Conservation Trust Fund

Financial contribution to forestry	Contribution to biodiversity and climate goal	Environmental sustainability	Social sustainability
<ul style="list-style-type: none"> largely directed towards biodiversity increased interest from MECC to combine the biodiversity and forestry tasks in multi-faceted activities "eternal Mongolia" initiative has raised \$28 million. 	<ul style="list-style-type: none"> direct targeted activities on biodiversity, socio-economic benefits projected from CTF activities, which will have adaptation benefits 	<ul style="list-style-type: none"> Mongolia aims to increase its protected area upto 30% of its territory by 2030 funding for the protection and sustainable management of natural resources high significance in ecosystem preservation 	<ul style="list-style-type: none"> increase the public awareness enable mutual benefits and collaboration between PA and local communities improving livelihood of herders traditional knowledge of the herders is incorporated
medium	high	high	high




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CIFOR-ICRAF

The Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) harnesses the power of trees, forests and agroforestry landscapes to shift the trajectories of three global issues – biodiversity, climate change and food security – supported by our work on equity and value chains. CIFOR and ICRAF are CGIAR Research Centers.