Global Gateway

Report

Forest finance landscapes

Compilation of assessments in 11 countries

© Kelvin Trautman/CIFOR-ICRAF

December 2025

The EU-funded Forests for the Future Facility (F4F) 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".

Assessment context

The compilation report brings together the findings from 11 country appraisals into a single, consolidated reference document that maps forest finance instruments across countries and highlights their alignment with international climate and biodiversity commitments, including the Paris Agreement, the Global Biodiversity Framework, the SDGs, and relevant national strategies (e.g. NDCs, NBSAPs). Its purpose is to facilitate cross-country learning, increase transparency on what instruments are applied where, and support EU Delegations and partners in identifying transferable or under-explored financing solutions. Each country country-level appraisal provides a concise, evidence-based overview of the forest finance landscape in each target country, with the purpose of supporting national forest sector objectives and informing potential future engagement by governments, the EU, and development partners. It assesses how current financing levels and instruments align with national ambitions for sustainable forest management, conservation, restoration, and forest-based value chains, and identifies financing gaps, bottlenecks, risks, and enabling conditions. By evaluating the effectiveness and scalability of existing and potential forest finance mechanisms, the appraisal offers practical, country-specific insights to guide dialogue, prioritisation, and future investment decisions.

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. 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.

Gassner A., Komarudin H., Liagre L. (2025). *Forest finance landscapes - Compilation of assessments in 11 countries.* CIFOR-ICRAF (Study implemented by the EU Forests for the Future Facility).

Disclaimer

The country-level appraisals were 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.

Printed by Particip GmbHThis publication was produced with the financial support of the European Union. Its contents are the sole responsibility of Particip GmbH and do not necessarily reflect the views of the European Union.

Project implemented by:

Lead company

Table of Contents

List of Tables and Figures

Tables

Box

Acronyms

ADB	Asian Development Bank
AFD	Agence Française de Développement
AfDB	African Development Bank
ART-TREES	Architecture for REDD+ Transactions – The REDD+ Environmental Excellence Standard
BIOFIN	Biodiversity Finance Initiative
BM	World Bank
CAFI	Central African Forest Initiative
CCDA	Climate Change and Development Authority (PNG)
CIF	Climate Investment Funds
CIFOR-ICRAF	Center for International Forestry Research and World Agroforestry
COMIFAC	Central African Forests Commission
CTF	Conservation Trust Fund
DNS	Debt-for-Nature Swap
DRC	Democratic Republic of the Congo
EC / EU	European Commission / European Union
EDFI	European Development Finance Institutions
EFSD+	European Fund for Sustainable Development Plus
EIB	European Investment Bank
EUDR	EU Deforestation Regulation
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FPBG	Fonds pour la Préservation de la Biodiversité du Gabon
FPF	Forest Protection Fund (Lao PDR)
FPIC	Free, Prior and Informed Consent
FRF	Forestry Revolving Fund (Guyana)
FVB	Fondo para la Vida y la Biodiversidad (Colombia)
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse Gas
GRIF	Guyana REDD+ Investment Fund
HFLD	High Forest, Low Deforestation
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund

INTPA	Directorate-General for International Partnerships (European Commission)
IPED	Institute of Private Enterprise Development (Guyana)
ITMOs	Internationally Transferred Mitigation Outcomes
JICA	Japan International Cooperation Agency
LEAF	Lowering Emissions by Accelerating Forest Finance
MAPMDREF	Moroccan Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests
MIC	Middle-Income Country
MINFOF	Ministry of Forestry and Wildlife (Cameroon)
MINEPDED	Ministry of Environment, Nature Protection and Sustainable Development (Cameroon)
MRV	Monitoring, Reporting and Verification
MSME / SME	Micro, Small and Medium-sized Enterprise / Small and Medium-sized Enterprise
NBSAP	National Biodiversity Strategy and Action Plan
NDC	Nationally Determined Contribution
NFMS	National Forest Monitoring System
NFF	National Forest Fund
NGO	Non-Governmental Organisation
NTFP / NWFP	Non-Timber (or Non-Wood) Forest Products
OBC	Organisation for Biodiversity Credits
PA	Protected Area
PES	Payments for Ecosystem Services
PNG	Papua New Guinea
PPP	Public–Private Partnership
PSA	Pago por Servicios Ambientales (Payment for Environmental Services)
REDD+	Reducing Emissions from Deforestation and Forest Degradation, conservation, sustainable management of forests, and enhancement of forest carbon stocks
RENARE	National Registry for the Reduction of Emissions (Colombia)
RoC	Republic of the Congo
RBP	Results-Based Payments
SDGs	Sustainable Development Goals
SEZ	Special Economic Zone
SFM	Sustainable Forest Management
SMByC	Forest and Carbon Monitoring System (Colombia)
SWM	Sustainable Wildlife Management Programme
TA	Technical Assistance
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
VPA	Voluntary Partnership Agreement (EU–FLEGT)
VCM	Voluntary Carbon Market
WB	World Bank
WWF	World Wide Fund for Nature

Executive summary

This executive summary presents the key findings, analysis, and opportunities emerging from a compilation report commissioned by the EU's Forests for the Future Facility (F4F). The report consolidates evidence from eleven country-level appraisals, without adding new primary analysis, into a single reference document that maps forest finance instruments across countries and examines their alignment with international climate and biodiversity commitments, including the Paris Agreement, the Global Biodiversity Framework, the Sustainable Development Goals (SDGs), and relevant national strategies such as Nationally Determined Contributions (NDCs) and National Biodiversity Strategies and Action Plans (NBSAPs). The countries included in the appraisal were Cameroon, Congo, DRC, Marocco, Colombia, Gabon, Guyana, Suriname, Laos, PNG and Zambia.

The compilation report aims to facilitate cross-country learning, enhance transparency regarding which forest finance instruments are applied where, and support EU Delegations and partners in identifying transferable or under-explored financing solutions. By synthesising country-level evidence, the report highlights key gaps, constraints, and opportunities to scale or introduce effective forest finance instruments, providing insights to inform future investments, policy dialogue, and the design of national forest finance strategies and pilot initiatives. This synthesis is qualitative; where evidence is thin or absent in a country appraisal, the compilation flags it as 'not evidenced' rather than inferring.

The findings are based on preliminary scoping analyses that combine desk research and stakeholder interviews. The studies provide a valuable overview of forest finance systems despite limitations, including incomplete information on finance flows, underrepresentation of certain stakeholder groups across countries, such as local and Indigenous communities, and the ongoing development of several financing mechanisms. The results should be interpreted as indicative rather than exhaustive.

Key findings on forest finance systems

The eleven assessed countries represent diverse forest and economic contexts, varying in forest cover, deforestation pressures and income levels. Most fall into either high-forest, low-deforestation (HFLD) or medium-forest, moderate-deforestation categories. These factors strongly influence their eligibility and positioning within international forest and climate finance mechanisms. Across all cases, forest-sector financing remains inadequate and highly fragmented. Public, private, and international financial flows often operate in silos, reducing overall effectiveness and limiting progress toward national forest, climate, and biodiversity goals.

Forest finance systems across the assessed countries remain fragmented and uneven in maturity, with persistent gaps in implementation, coverage, and enabling environments. Targeted support is needed to strengthen delivery mechanisms and scale effective solutions. Significant potential exists to expand proven forest finance tools through capacity development, technical assistance, and knowledge sharing. Stronger public–private collaboration is essential to create enabling conditions for investment through legal frameworks, de-risking tools, and domestic financing mechanisms.

Across the eleven countries, the most widely applied forest finance mechanisms are public finance instruments, national forest and conservation trust funds (NFFs/CTFs), and carbon markets. Successful examples include Gabon's Fonds pour la Préservation de la Biodiversité et du Climat, Guyana's Protected Areas Trust and Forestry Revolving Fund, and Colombia's diversified public–private architecture linking fiscal reforms and carbon revenues. These demonstrate that transparent governance, stable public funding, and integration with carbon finance are key enablers of scale.

Emerging instruments, such as biodiversity credits, debt-for-nature swaps, green and sustainability-linked bonds, and impact finance, show strong potential when enabling frameworks are in place. Gabon's 2023 Blue Bond debt-for-nature swap, Morocco's green bond market, and Colombia's sovereign green bonds and impact investment funds exemplify early success in attracting private capital for conservation. Pilot initiatives in Gabon (Okala biodiversity crediting platform) and Cameroon (NatureAfrica and Grand TNS projects) are laying the groundwork for future biodiversity markets.

Carbon markets, anchored in REDD+ frameworks and supported by national monitoring, reporting, and verification (MRV) systems, are more advanced than biodiversity markets, which remain in early development. Countries such as Guyana, Gabon, Colombia, and Lao PDR have demonstrated progress through verified carbon credit transactions, results-based payments, and strong institutional capacity. Biodiversity initiatives in Gabon, Guyana, and Cameroon are developing foundational monitoring and governance systems to support high-integrity biodiversity markets.

Experience across countries for both carbon and biodiversity offsetting suggests that formal national registries, such as Guyana's ART-TREES system, Colombia's RENARE registry and habitat bank and Gabon's national carbon registry, enhance transparency and market integrity, ensuring alignment with national objectives.

Analysis

The analysis suggests that strengthening coordination, alignment and integration among existing public, private and market-based finance instruments offer greater potential for impact than developing new standalone initiatives. Enhanced coherence across mechanisms would increase efficiency within national forest finance frameworks and maximise synergies.

Donor and development partner finance remain critical to achieving national forest, climate , and biodiversity objectives. National Forest and Conservation Trust Funds provide effective platforms to align bilateral and multilateral resources for coherent investment and coordination among diverse partners. The Green Climate Fund (GCF) , for example, has demonstrated how coordinated international funding can strengthen institutional capacity and innovative instruments, such as green bonds and REDD+, to advance forest and biodiversity outcomes.

In Papua New Guinea, Cameroon, Colombia, Zambia, and Gabon, targeted concessional finance, grants, and technical assistance have proven effective in helping small and medium enterprises (SMEs) and community enterprises adopt sustainable practices, improve productivity, and access new markets. These interventions generate positive effects across timber and non-timber forest product (NTFP) value chains. To further scale private-sector participation, key bottlenecks, including land tenure insecurity, outdated concession frameworks, weak investment pipelines, and limited domestic finance engagement, must be addressed. Development finance can play a pivotal role in de-risking investments, strengthening institutional capacity, and aligning governance frameworks to unlock private-sector growth in forest-based economies.

Most countries have developed numerous pilot projects, initiatives, and programmes targeting forest finance solutions, including Cameroon, the Democratic Republic of the Congo, the Republic of the Congo, Gabon, Guyana, Zambia, Lao PDR, Papua New Guinea, Morocco, and Colombia. However, many lack a coherent framework to scale these efforts and leverage synergies across mechanisms. This absence of strategic alignment limits overall impact and sustainability, for example in the Congo Basin,

where strong foundations for many forest finance solutions exist but remain fragmented and insufficiently coordinated.

Public finance instruments, such as national forest funds, budgetary transfers, concessional spending, green taxes and levies, and targeted public investment, form the fiscal backbone of forest-sector development. They set incentives, co-finance enabling infrastructure, and attract private participation. Modernisation tools, including green budget tagging, subsidy reform, and digital tax or legality systems, are essential for aligning public spending with biodiversity and climate outcomes.

Further in-depth, country-specific studies are required to better understand systemic challenges and market dynamics, supporting more evidence-based policy and investments. Addressing environmentally harmful subsidies is also essential, as they undermine sustainable forest management and distort market incentives that could otherwise attract private-sector investment.

Priority areas for action

Several forest finance instruments across the eleven assessed countries demonstrate strong readiness for development of finance support. The assessment pointed to high-potential instruments that combine enabling policy environments, active national funds or registries, and demonstrated private-sector or donor participation.

National Forest Funds and Conservation Trust Funds (Cameroon, Guyana, Colombia, Morocco) can provide effective platforms for pooling domestic, donor, and private resources, provided that relevant governance reforms are conducted. Development finance could help implement reforms in governance, spending modalities, and capitalisation diversification, to ensure NFFs and CTFs deliver their full potential for forest, biodiversity, and climate outcomes.

Carbon finance and results-based payments (Guyana, Colombia, Lao PDR, Gabon) mobilise large-scale results-based finance for example under REDD+ and ART-TREES. However, to achieve livelihood outcomes for forest dependent communities, the experience of successful microfinance institutions shows that deep inclusion was achieved not through guarantees or risk transfer, but through grant-like, patient capital that strengthened institutions and absorbed early losses on balance sheet.

In forest and carbon finance, therefore, grants must precede guarantees, enabling forest-dependent livelihoods to reach a level of organization and resilience where carbon finance and results-based payments can function without shifting risk onto those least able to bear it.

Impact and Blended Finance for forest value chains (Colombia, Zambia, Gabon) can stimulate private investment in sustainable timber, agroforestry, and NTFP enterprises. Development finance could develop blended finance windows combining concessional loans, guarantees, and technical assistance for SMEs.

Green and sustainability-linked bonds (Morocco, Colombia, Gabon) expand access to sustainable capital markets. Development finance could provide guarantees and first-loss tranches for sovereign or sub-sovereign issuances, alongside technical assistance for developing forestry-linked bond pipelines.

Community and Indigenous finance mechanisms (Guyana, Suriname, Colombia) offer inclusive and high-impact models that deliver strong social and environmental returns. Development finance can support technical assistance, grant windows, benefit-sharing mechanisms, and recognition of community tenure linked to verified results.

Emerging biodiversity finance and Payment for Ecosystem Services PES (Gabon, Morocco, Cameroon) initiatives demonstrate strategic potential. Development finance could offer technical assistance and blended finance to operationalise biodiversity credit pilots, establish valuation methodologies, and integrate biodiversity MRV into national registries. Besides development finance can support the scaling up of PES mechanisms from local pilots to national impactful schemes.

1

Introduction

Global forest loss continued to rise in 2024, with tropical regions losing an estimated 6.7 million hectares of primary forest, the highest level recorded in over two decades[1]. Increasing wildfire incidence, linked to record heat and drought, has overtaken agricultural expansion as the main driver of deforestation, releasing substantial greenhouse gas emissions and reducing global climate resilience.

In response, the international community has pledged ambitious commitments to protect and restore forests through initiatives such as the Paris Agreement, the Bonn Challenge, and the Trillion Trees Initiative. Yet, a global forest finance gap exceeding USD 340 billion annually threatens progress. While public finance remains dominant, private investment and blended finance models are essential to scale up nature-based solutions.

Against this backdrop, the European Commission's Forests for the Future Facility (F4F), in collaboration with CIFOR-ICRAF, conducted a Forest Finance Mapping across 11 countries to identify scalable, effective financing mechanisms for sustainable forest management, conservation, and restoration. The mapping constitutes the first comparative review of its kind across Asia, Latin America, and Africa, identifying potential entry points for development finance to enhance public and private instruments and address the forest finance gap that constrains national biodiversity and climate objectives.

1.1 Purpose and scope

This compilation report synthesises findings from 11 country-level appraisals into a consolidated reference that maps forest finance instruments and assesses their alignment with international climate and biodiversity commitments, including the Paris Agreement, the Global Biodiversity Framework, the SDGs, and relevant national strategies such as NDCs and NBSAPs. It aims to support cross-country learning, enhance transparency on the application of forest finance instruments, and assist EU Delegations and partners in identifying transferable or under-explored financing solutions. Each appraisal provides an evidence-based overview of national forest finance landscapes, examining alignment with forest sector ambitions and identifying financing gaps, bottlenecks, risks, and enabling conditions to inform policy dialogue, prioritisation, and future investment decisions.

1.2 Sources and limitations

The country appraisals were designed as preliminary, evidence-based scoping analyses intended to provide a structured and comparable overview of each country's forest finance landscape. They are decision-support documents, sufficient to inform dialogue on forest finance priorities and potential future engagement, but not intended to be exhaustive assessments of all financing instruments or financial flows.

1 https://www.globalforestwatch.org/dashboards/global/

The analysis draws on a combination of desk-based review of available documentation and key informant interviewswith public, private, and civil society stakeholders in the target countries. The findings reflect documented evidence and stakeholder perspectives available within the assessment period.

The following limitations are acknowledged:

1. While efforts were made to capture a broad range of perspectives, stakeholder participation was voluntary. Some groups, particularly local and Indigenous forest communities, were represented primarily through intermediary organisations such as NGOs.
2. Information on finance flows, baseline data, and MRV systems was often fragmented, incomplete, or inconsistent across sources, limiting the precision of some assessments.
3. The time-bound nature of the assignment constrained the depth of analysis and the ability to independently verify all data.
4. Limited transparency or data availability from certain government and private-sector actors may have affected the completeness or accuracy of reported information.
5. Several finance instruments and mechanisms were still under development or pending at the time of assessment, reducing certainty regarding their effectiveness or long-term applicability.

The comparative synthesis derived from the country appraisals has not been formally validated by the original country report authors and should be interpreted in light of the above limitations.

1.3 Cross-country overview: Forest cover, deforestation rate, and income classification

The assessed countries display high ecological diversity and contrasting economic structures, but most fall into the high-forest, low-deforestation (HFLD) or medium-forest, moderate-deforestation categories. These dynamics directly shape their access to international climate and forest finance mechanisms and the types of instruments that are most applicable.

Gabon, Suriname, and Guyana are characterised as HFLD countries, maintaining very high forest cover—generally above 80 percent—and historically low deforestation rates. They have positioned themselves as leaders in REDD+ and voluntary carbon markets, supported by relatively advanced forest monitoring systems and the establishment or planned use of national forest or climate funds. Their upper-middle-income status and reliance on natural resource exports influence both opportunities for results-based finance and the political economy of forest protection.

The Republic of Congo, the Democratic Republic of Congo (DRC), and Cameroon retain substantial forest cover, typically between 40 and 65 percent, but face persistent deforestation pressures driven by agricultural expansion, logging, and fuelwood extraction. These lower-middle-income countries experience high poverty incidence and strong dependence on forest resources, underscoring the need for forest finance approaches that combine conservation objectives with livelihood and development outcomes.

Zambia and Lao PDR are characterised by medium forest cover and higher rates of forest loss linked to shifting cultivation, charcoal production, and infrastructure development. Both countries are exploring reforestation, sustainable forest management, and green value-chain initiatives, largely supported by donor and concessional finance.

Morocco and Colombia present contrasting forest contexts. Morocco, with relatively low forest cover, focuses forest finance on afforestation, restoration, and non-timber forest product value chains. Colombia, with substantial forest cover, experiences localised deforestation hotspots linked to land-use change and governance challenges, but benefits from comparatively strong institutional, MRV, and financial frameworks.

Papua New Guinea retains very high forest cover but faces increasing deforestation risks from logging and agricultural conversion, highlighting the importance of strengthened governance and monitoring to sustain forest finance engagement.

2

Current forest finance and investment

The forest sector in the assessed countries is characterised by financing and investment gaps, with available resources described as both insufficient and fragmented. Although the composition of financial actors varies by country, all are marked by a complex mix of public and private financial flows at domestic and international levels. Funding sources differ substantially, yet in all cases, public budgets, private capital, and international support mechanisms play key role (see Annex 2, Table 21). The diversity and dispersion of actors and instruments hinder the development of coherent national financing frameworks.

Enhanced impact can be achieved through improved coordination, alignment, and integration of existing forest finance mechanisms, leveraging complementarities across public, private, and market-based instruments, rather than through the creation of new standalone initiatives.

The next sections provide an overview of public, private, and international sources of forest finance, highlighting their focus areas for investment and major gaps by country.

2.1 Public funding sources

Public sources of funding are operationalised, managed or implemented by the government – either directly allocated to the forest sector in annual budget lines or through instruments such as National Forest Funds.[2]

Allocation of these funds determines the financial sustainability of the forest sector. Annual government budget cycles are often volatile and shaped by shifting economical and political priorities.

Common factors influencing public funding include, first, competing national priorities. These include political mandates, popular development projects, and debt servicing. Second, ability to collect taxes, licensing fees and other government income and related challenges due to a combination of potential factors, including large forest informal economies, lack of government enforcement capacity, or corruption.

2.2 Private funding sources

Private finance is present in all countries but sources remain limited, with the exception of some cases such as Laos. The reports identify several reasons for this scarcity.

Many banks consider the forestry sector to be "high risk", meaning business operators are ineligible for loans and other incentives in many countries. There is a need for blended impact finance to de-risk forest investments and develop tailored products for sustainable forest, biodiversity and ecosystem financing.

Similarly, few countries have developed long-term successful vehicles and frameworks to channel private-equity, debt, impact investment capital, derisking mechanisms, and ESG infrastructure into the forest sector.

2 See 4.1 for public finance and 4.3 for NFFs

Forest financing instruments often involve complex multilateral agreements with international development partners and government ministries, which are not conducive to public sector participation, especially for SMEs. In addition, SMEs commonly struggle to access financing due to lack of financial literacy, informal status and weak collateral.

Lack of clarity on land ownership, management rules and community governance structures demotivates formal private sector investments in the forestry sector. Investment in non-timber forest products remains minimal.

2.3 International funding sources

Donor and development-partner finance from NGOs and foreign governments remains a major source of funding in all countries. These funds are essential for contributing to technical capacity and capacity development.

Positive developments are the coordination and channelling of grants and concessional resources from bilateral and multilateral partners such as the EU, GEF, World Bank, and UNDP through national forest funds, environmental protection funds, and multi-donor trust facilities allowing a more coordinated national approach to sustainable forest management (SFM), conservation, and restoration finance.

Across all countries, the Green Climate Fund (GCF) has an important role as a readiness and catalytic financing partner. In Gabon, GCF engagement is being explored to develop a green bond pipeline and operationalise the Fonds pour la Préservation de la Biodiversité.

In the DRC and Congo, GCF readiness programmes have strengthened institutional capacity for REDD+ and carbon finance integration. Zambia and Lao PDR have benefited from GCF-supported projects focused on sustainable landscapes and climate-resilient agriculture, indirectly supporting forest objectives. In Guyana and Colombia, the GCF complements existing carbon finance and climate investment frameworks, while in PNG, coordination with CCDA is underway to integrate GCF co-financing into national forest and climate programs.

2.4 Main finance and investment gaps

Despite multiple initiatives, significant gaps persist. Investment in sustainable forest management (SFM) remains low across the assessed countries. Funding for wood production, forest restoration, plantations, non-timber forest products (NTFPs) and environmental services are limited. Infrastructure is often outdated, and incentives for modernisation or certification are weak, constraining the sector's ability to compete and deliver sustainable economic returns.

Forest-based industries also face structural challenges. Many countries, including the Democratic Republic of the Congo, the Republic of the Congo and Gabon, operate with obsolete wood-processing facilities and limited access to long-term credit or equity needed for expansion and technological upgrading. These constraints hinder value addition and the development of sustainable forest value chains.

Forest protection initiatives continue to struggle with unstable and inadequate funding. Financing for REDD+ and payment for ecosystem services (PES) schemes remains fragmented, and the absence of comprehensive legal frameworks for carbon and biodiversity markets further limits progress.

In protected area management, most conservation trust funds are under-capitalised and depend heavily on external donors. Weak domestic financing and limited data on biodiversity baselines constrain the ability to design and implement sustainable financing mechanisms that ensure long-term protection and effective management of protected areas.

The reports highlight the need for more stable sources of finance and clearer frameworks to attract both public and private investment.

3

Analysis of applied forest finance solutions and instruments

Based on the range of instrument types referenced by key informants, there is a high variation in the application of forest finance instruments across countries, reflecting varying levels of stakeholder familiarity and experience with these tools. Public finance, National Forest Funds/Conservation Trust Funds (NFFs/CTFs), and carbon markets/carbon finance are the most widely recognised and utilised instruments, with stakeholders in nine out of eleven countries referring to within country application. In contrast, biodiversity markets and Debt-for-Nature swaps are the least mentioned instruments, used in only one country and three countries, respectively.

Guyana and Suriname uniquely recommended the establishment of Indigenous- and community-led funds—an instrument not identified in any other country report. Although neither country has operationalised these funds to date, they are grouped with NFFs/CTFs for the purposes of this analysis. However, their implementation would require more innovative and inclusive governance structures than those observed in other country examples.

Colombia demonstrates the greatest diversity in forest finance instruments, applying a total of 11, whereas Papua New Guinea (PNG) and Suriname exhibit the least diversity, each applying only three instruments. Table 4 provides a comparative summary of these instruments, assessing their effectiveness, scalability, and key bottlenecks.

3.1 Public finance instruments

Table 1 provides an overview of relevant state actors and their roles regarding the enabling environment for scaling financial instruments.

Across all countries, public finance remains the foundation of forest-sector investment, shaping the fiscal and institutional environment for sustainable management, industrial transformation, and biodiversity conservation. National forest funds, budgetary transfers, and concessional spending still account for over 70 % of total forest investments, while private participation remains modest. Table 1 provides an overview of relevant state actors and their roles regarding the enabling environment for scaling financial instruments.

	Legal & regulatory frameworks	Public finance & national funds	Enabling markets & private finance
Entry points	Environment/Forestry ministries; Climate authorities & REDD+ focal points; Legislatures; Financial and land-use regulators; Ministries of Finance	• Ministries of Finance/Budget; National forest/environment funds; Line ministries; Treasury and audit institutions	• Ministries of Finance/Economy; • Central banks & financial regulators; • Public development banks; • Climate finance units & registries
Role	Clarify and operationalise laws on carbon rights, benefit-sharing, PES, biodiversity credits, land tenure, and market rules	• Define mandates, governance, and coordination of national funds, earmarked taxes, subsidy reform, and budget tagging	• Clarify public roles in enabling carbon markets, PES, green bonds, PPPs, and blended finance
Potential lever	• Policy dialogue (legal alignment, adoption) • Technical assistance (laws, decrees, registries, safeguards)	• Policy dialogue (fiscal reform, earmarking) • Technical assistance (fund governance, traceability) • EFSD+ (anchoring blended structures)	• Technical assistance (MRV, pipelines, safeguards) • EFSD+ (guarantees, risk-sharing • Policy dialogue (integrity principles, neutrality)

Effectiveness

Fiscal reforms, including green budget tagging, environmental levies, and subsidy repurposing, are advancing unevenly. Gabon and Morocco lead by embedding sustainability in fiscal frameworks: Gabon's Fonds pour la Préservation de la Biodiversité et du Climat channels state and donor revenues into conservation and value-chain investments, while Morocco's Fonds National des Forêts finances reforestation and NTFP development. In Cameroon, DRC, and Congo, reliance on concession royalties and export taxes limits resilience and revenue potential. Colombia's 1993 Law 99 introduced a fiscal reform based on the polluter-pays principle, making those who cause environmental harm financially responsible for the costs of restoration. This legal and fiscal framework enabled the creation of Colombia's habitat bank, the first in the tropics, turning ecological liabilities into verified conservation investments and biodiversity credits.

Fiscal modernisation, including digital tracking, earmarked levies, and simplified tax regimes, is underway to broaden the tax base and encourage SME formalisation. Zambia and Lao PDR are piloting green budget tagging and environmental charges, while Colombia and Guyana demonstrate how tax incentives linked to reforestation and REDD+ revenues can mobilise blended finance and private investment. Morocco, Cameroon, and the DRC have advanced fiscal and budgeting frameworks that can integrate green budget tagging and subsidy reform. Congo Basin countries, including Gabon and Cameroon, would benefit from fiduciary upgrades of their forest funds to improve transparency and accountability.

Public investment in infrastructure remains decisive for competitiveness. Gabon's Nkok Special Economic Zone exemplifies successful state-backed industrialisation, integrating renewable energy and logistics to boost value-added timber exports and employment. Conversely, infrastructure

gaps in Cameroon, DRC, and Congo, notably transport and energy deficits, inflate transaction costs. Zambia and Lao PDR are improving rural connectivity for plantation and NTFP markets, while Morocco's argan and cork cooperatives and Colombia's restoration-based enterprises show how targeted expenditure can expand sustainable production and inclusion.

Alignment with EUDR and FLEGT is driving transparency and fiscal innovation. Cameroon and Gabon are digitalising legality systems and reforming forest taxation to meet EUDR standards, while Guyana's VPA process advances full compliance. These measures underpin market access, certification-linked tax incentives, and EU-aligned investment under EFSD+ and Global Gateway.

Scalability

The scalability of public finance for forests depends on three interlinked enablers: robust fiscal frameworks, strategic infrastructure investment, and governance conditions that attract private capital. Country evidence shows that fiscal and institutional reforms can unlock investment when paired with efficient public spending and blended finance instruments.

Opportunities to scale the efficiency of public finance instruments include developing coherent fiscal reform packages that embed forest finance within national development strategies, linking budget allocation, taxation, and performance-based spending to sustainability outcomes.

Despite the fact that some countries have developed numerous pilot projects, initiatives, and programs around different forest finance solutions, what is often missing is a coherent framework to scale up these efforts and leverage synergies across mechanisms. This lack of strategic alignment limits the overall impact and sustainability of financing solutions. This situation is, for example, acute in Congo Basin countries, where strong foundations already exist for several financing solutions but remain fragmented, insufficiently coordinated, and on a limited scale.

Major bottlenecks

Country reports highlight several recurring challenges affecting public finance for forests:

1. Macroeconomic crises and competing priorities, as seen in the DRC and RoC, severely limit fiscal space, with urgent debt repayment, infrastructure, and social spending consistently prioritised over forest governance.
2. Weak fiscal capacity undermines revenue generation and enforcement; in countries such as Cameroon and Zambia, challenges in tax collection and budget retention mean that even existing revenue streams cannot be fully mobilised.
3. Policy incoherence and contradictory incentives undercut forest finance goals as for instance, Gabon's subsidies for unsustainable agriculture dilute the benefits of its forestry incentives.
4. Public finance in MICs has been functional but conservative, funding basic oversight (e.g., Morocco) while missing opportunities to leverage innovation, blended finance, or stronger public–private partnerships.
5. Volatility in government revenues due to the annual budget cycle discourages long-term planning and undermines investor confidence, making it difficult to scale public forest finance or align it with international mechanisms such as REDD+ or ART-TREES.

3.2 PES (or other incentives scheme)

Payments for Ecosystem Services (PES) have become one of the most commonly used and effective instruments for financing forest conservation and sustainable land management. Country reports describe their application in various forms. Two main categories of PES can be distinguished: local pilot schemes on the one hand, and national mechanisms on the other. Local pilot PES schemes are typically based on direct agreements between a single ecosystem services (ES) buyer (for example, a private company or another stakeholder) and one or several ecosystem services (ES) providers (often local communities or producer organisations). These initiatives are highly localised and allow for the testing of innovative approaches, but usually do not scale up on their own unless supported by an intermediary or facilitating structure that can help coordinate, standardise, and aggregate actions across sites.

In contrast, national PES mechanisms rely on a more structured architecture, bringing together a broader range of ES buyers and providers and often integrating multiple ecosystem services (e.g., carbon, water, biodiversity). This broader design enables replication, mobilises larger financial volumes, and enhances the long-term sustainability of impacts.

Effectiveness

In practice, the effectiveness of PES schemes largely depends on their scale of application and on their integration with other financial instruments and funding sources. When combined with mechanisms such as national forest funds, conservation trust funds, domestic public finance, carbon market instruments, and green fiscal policies that help capitalise these mechanisms, PES can effectively channel resources to community-based value chains, agroforestry, conservation, and tree-planting initiatives. This multi-actor, blended-finance approach greatly strengthens their potential to deliver meaningful biodiversity and climate outcomes.

Colombia, DRC, RoC and Zambia mentioned PES and similar incentive schemes as one of the most promising ways to incentivise conservation and benefit local livelihoods through NTFPs and tourism, if they can be scaled up effectively.

PES has been seen as a potential tool for compensating Indigenous Peoples and local communities for ecosystem management services and for integrating them into inclusive governance approaches. However, several reports noted that access to PES schemes and benefit-sharing remain limited overall for local communities and vulnerable people.

Scalability

The scalability of PES or other incentive schemes appears largely dependent on appropriate regulatory frameworks, inclusive design, and blended approaches with other financial instruments.

Some countries, such as Cameroon and PNG, have only piloted PES schemes at the project level. In Zambia, limited PES application was reported due to the absence of supportive policies and systems. Broader implementation often requires integration with existing funds and other financial instruments.

For example, Morocco has implemented a PES-like scheme compensation pour mise en défense into its National Forest Fund (NFF), which financially compensates sylvo-pastoral associations for excluding grazing and agricultural activities from forest regeneration zones.

The NFF acts as a stable payment channel and monitoring hub, funded through national taxes, to incentivise sustainable forest management. The report suggests scaling up this successful initiative by establishing a national PES framework and integrating private-sector and sub-national stakeholders into the scheme.

Major bottlenecks

Despite strong evidence of effectiveness, PES and other incentive schemes face several systemic barriers:

1. **Policy and regulatory gaps:** many countries have only pilot projects, without long-term national frameworks (e.g., Cameroon, PNG, Zambia).
2. **High dependency on funding sources**: Lao's PES, for example, depends heavily on revenues from a single hydropower project, while other schemes highly rely on donor finance.
3. **Complex access procedures and bureaucratic frameworks** may exclude Indigenous Peoples and local communities, undermining inclusive governance and equitable benefit-sharing.

4. **Administrative and technical limitations**, such as inadequate payment systems, contract enforcement, and training for effective PES implementation

5. **Weak integration into broader financial architectures** (e.g. public budgets, national forest funds, carbon markets) means PES risks remaining fragmented and small-scale, with limited impact on national forest finance goals.

3.3 National Forest Funds / Conservation Trust Funds

National Forest Funds (NFFs) and Conservation Trust Funds (CTFs) are mechanisms for financing forest conservation, biodiversity protection, and sustainable land use. Their structures vary in funding sources, governance models, and institutional mandates. Examples include:

- **Cameroon:** The PSFE (Programme Sectoriel Forêt Environnement) Common Fund receives funding from a Contrat de Désendettement-Développement (C2D) between France and Cameroon and provides technical assistance, training and audits to support priority areas. Cameroon also hosts a Conservation Trust Fund known as the Fondation pour le Tri-National de la Sangha (FTNS), which operates across three countries (Cameroon, the Central African Republic, and the Republic of Congo) to support the conservation and sustainable management of the Sangha Tri-National landscape, a transboundary UNESCO World Heritage Site.
- **Colombia:** The Life and Biodiversity Fund (FVB) is largely funded through the national carbon tax and invests in the Amazon region through a diversified portfolio.
- **Gabon:** The Gabon Biodiversity Protection Fund (FPBG) is a national conservation trust fund and an independent legal entity that was originally established to oversee the "Blue Bond" debt-for-nature swap. Gabon intends to transition the FPBG into a long-term finance mechanism for protected areas through an endowment and transition fund that are governed by a multi-stakeholder board of ministries, international donors and CSOs.

Effectiveness

While some funds demonstrate strong governance, financial absorption, and conservation outcomes, others face underfunding, weak enforcement capacity, or limited inclusivity. NFFs and CTFs are considered effective and scalable in contexts characterised by a high degree of financial transparency, inclusive open governance and oversight, combined with sustainable financial flows sourced from a variety of donors and financial partners.

Some funds, such as Guyana's, operate with independent boards and multiple financing sources. Others face challenges of underfunding or reliance on external partners.

Cameroon, RoC and DRC reports all mentioned challenges in resource mobilisation and capitalisation for national funds, reducing the potential for increased investment and financing for sustainable forest management, conservation and restoration.

Guyana has a portfolio of national and conservation trust funds that demonstrate the diverse possibilities for successful forest financing. Its Protected Areas Trust (PAT) for example is governed by an independent board of trustees and operates with an endowment, multi-stakeholder governance, and high grant execution rates. The Forestry Revolving Fund (FRF) is governed by a public-private partnership between the Government of Guyana and Demerara Bank Limited. Funds strengthen the forest value chain and improve access to affordable credit for SMEs and sawmillers.

Scalability

Scalability of NFFs is often described as linked to diverse funding sources, transparent governance, and enabling legal frameworks. For example, Guyana's FRF, while improving access to affordable credit for some SMEs, has high collateral requirements that exclude many informal or small-scale operators. To improve loan uptake and repayment, the report recommended integrating business development and technical assistance in the fund's activities.

Most reports across all surveyed geographical areas (from Cameroon to Colombia and Laos) recommended structuring NFFs with multiple funding sources and markets to improve scalability.

Appropriate legal frameworks, administration

systems, funding transparency and MRV systems are also prerequisites to scaling NFFs and ensuring even access at the national and sub-national levels, as noted in Lao and PNG frameworks. Notably, in Morocco and Gabon, assessments raised concerns that restricting the governance of NFFs to national government ministries could limit their transparency and sustainable scaling due to changing political objectives over time.

In both Suriname and Guyana, there is an expressed interest in launching Indigenous and community-led funds, with donors showing early interest in supporting such initiatives.

The scalability of Conservation Trust Funds (CTFs), like that of National Forest Funds (NFFs), relies heavily on robust, transparent governance frameworks and sound financial management strategies. Strong governance structures ensure accountability, build stakeholder trust, and enable the effective coordination of diverse funding sources. Equally important is the management of endowments, which requires professional investment strategies to secure stable and long-term revenue streams. To achieve meaningful scale, CTFs must also develop and implement comprehensive fundraising strategies, diversifying their financial base beyond traditional donor contributions to include innovative financing mechanisms, private sector engagement, and domestic resource mobilisation.

Major bottlenecks

The reports highlight the need for careful planning, effective governance, and sufficient financing to ensure the success and sustainability of forest finance initiatives through NFFs and CTFs. Challenges include inadequate or unstable funding sources (including for endowments); limited transparency when governance is concentrated in government ministries; and barriers to inclusivity exist, with some groups being excluded due to collateral requirements or financial literacy thresholds.

These factors influence how such funds operate and their capacity to channel long-term financing for forest-related activities.

Table 3 provides an overview of potential leverage points for development finance across each of the assessed countries, highlighting where targeted engagement could support the scaling and effectiveness of National Forest Funds / Trust Funds.

Table 1: National Forest Funds / Trust Funds / Dedicated Forest Finance Platforms

Country	Instrument / Action	Type	Why (from report)	Likelihood (H/M/L)
Cameroon	Reform National Forest Fund / create Forest Trust Fund	Blending; Guarantees	Pool public/private funds, finance MRV, de-risk projects	**High** – builds on existing fund & taxes
Colombia	Fondo para la Vida y la Biodiversidad (FVB) as platform	Blending; TA	€282M operational portfolio aligned with forest goals	**High** – active pipeline
Lao PDR	Reform & recapitalise EPF/ FPF	Blending; Policy	Existing funds under-capitalised; mandate reform needed	**High** – platforms already exist
Guyana	Strengthen & capitalise Forest Finance Revolving Fund	Blending; Policy	Central long-term funding for restoration/Indigenous peoples and local communities	**Medium–High** – allocation decisions pending
PNG	PNG Biodiversity & Climate Fund	Blending; Guarantees; Policy	Domestic conduit to pool and de-risk finance	**Medium–High** – governance design needed
Morocco	National Forest Investment Platform	Blending; TA	Coordinate fragmented funding streams	**High** – institutionally feasible
Zambia	Operationalise Forest Development Fund	Policy; Blending	Fund exists but inactive; high revenue potential	**Medium–High** – within mandate

3.4 Forest-value-chain finance instruments that support the conservation and restoration of forests

Timber production remains economically significant in the DRC, Congo, and Cameroon, where exports provide fiscal revenue, but sustainability is undermined by weak governance, informality, and outdated concession regimes. Gabon stands out as a regional benchmark for sustainable industrialisation through its Special Economic Zone model, which fosters value addition and certified production. In Guyana and Suriname, the timber industry contributes modestly to GDP, with growth in community forestry and certified SMEs driving sustainable value chains.

Zambia's timber sector remains small but is expanding through plantation forestry and sustainable charcoal production initiatives. Colombia's timber sector is limited but benefits from strong certification potential and NTFP diversification. Morocco and Lao PDR focus on domestic timber supply for restoration and rural livelihoods, while PNG remains a major tropical exporter seeking to strengthen legality and promote local processing to increase value capture.

Cameroon and the Republic of Congo are long-standing EU-FLEGT Voluntary Partnership Agreement (VPA) countries. Cameroon's VPA implementation has improved legality assurance and traceability systems, though enforcement challenges persist. Congo's progress is uneven, constrained by institutional and fiscal transparency issues. The DRC remains at an early engagement stage, with limited operational progress. Guyana's VPA process demonstrates high readiness, with active stakeholder involvement and clear linkages to REDD+ monitoring frameworks. Gabon, while not a VPA partner, applies strong legality and certification measures aligned with the EU Deforestation Regulation. Suriname pursues voluntary certification systems consistent with EU standards. Morocco, Lao PDR, Zambia, and PNG have not entered the VPA process but are developing national legality frameworks to align with emerging international market requirements.

Across all countries, forest-value-chain finance instruments, including microcredit schemes, concession mechanisms, SME support, outgrower and off-take contracts, and venture or catalytic funding, remain nascent but are increasingly recognised as critical to operationalising sustainable forest economies. Their effectiveness and scalability vary significantly depending on policy frameworks, access to finance, and private-sector maturity.

Effectiveness

Gabon's Special Economic Zone (Nkok) provides one of the most effective models, linking industrial concessions, certified timber processing, and export finance. Fiscal incentives and infrastructure attract private investment, though access to capital for SMEs remains limited. In Cameroon, DRC, and the Republic of Congo, value-chain finance is largely embedded in traditional concession models, which continue to dominate forest operations but deliver limited inclusivity or sustainability.

Guyana and Suriname demonstrate relatively high effectiveness in community-led forest enterprise finance. Their cooperative and smallholder models, supported by tenure clarity and voluntary certification, generate measurable livelihood impacts. In Colombia, innovative financing through impact funds, sustainability-linked loans, and corporate offtake agreements supports reforestation and agroforestry ventures, with tangible results at the landscape level.

Zambia and Lao PDR show positive outcomes from donor-backed micro-credit and out-grower schemes, though these remain dependent on concessional resources. Morocco's public forest fund effectively channels fiscal resources toward reforestation and landscape restoration, while PNG's community-based forestry finance mechanisms show local benefits but weak commercial integration.

Reported outcomes include improved access to markets and technical support for enterprises. However, national-level strategies for scaling such instruments remain limited in many contexts.

Early pilots in Papua New Guinea (PNG) and Cameroon demonstrate that targeted support, through technical assistance, concessional financing, and grant programs, can incentivise zero-deforestation value chains, improve productivity, and empower smallholder producers.

At the project level, targeted initiatives such as sustainable value chain pilots in PNG, and finance for SMEs through programs like the Amazonia Forever fund in Suriname, show that forest-linked enterprises can adopt sustainable practices when financial and technical support is available. However, scaling beyond project level remains limited.

Scalability

The scalability of forest-value-chain finance is constrained by market maturity, access to finance, and the limited depth of domestic financial ecosystems. Gabon's industrial cluster model demonstrates the highest scalability potential, driven by strong policy continuity and private-sector participation. Colombia's blended finance architecture, linking private capital with public guarantees, provides a replicable model for scaling nature-based enterprises.

In Guyana and Suriname, the community forestry model can scale through improved aggregation mechanisms, access to traceable markets, and enhanced technical assistance. Zambia and Lao PDR offer scalability potential for smallholder forestry through risk-sharing mechanisms and performance-based credit lines. Morocco and PNG exhibit low scalability due to limited SME finance channels and fragmented market linkages.

Across regions, scalability depends on expanding access to blended finance and de-risking instruments, creating predictable market demand through certification and public procurement, and establishing enabling policies for SME participation in restoration and sustainable timber value chains.

Even modest financing interventions, such as grants, concessional loans, or technical assistance, can generate broader economic impacts by enabling producers to increase productivity, access new markets, and attract additional private-sector investment. This ripple effect extends beyond the direct beneficiaries of forest-value chain finance to their suppliers, employees, and local service providers, thereby amplifying the overall benefits to forest communities and value chains. Consequently, while direct financing may initially reach a limited number of SMEs or smallholders, the indirect economic and social impacts can be substantial.

Major bottlenecks

Broader adoption of forest value chain finance is constrained by several factors:

1. Regulatory and fiscal constraints: Outdated concession and fiscal frameworks in Cameroon, DRC, and Congo limit SME participation and private investment. Although Gabon and Morocco advance green taxation and fund reforms, implementation remains fragmented, slowing integration of sustainability targets and access to blended finance instruments.
2. Land tenure insecurity: Unclear land and concession rights constrain bankability across Cameroon, DRC, and Congo, excluding SMEs from formal credit. Guyana and Suriname demonstrate that secure community tenure enables investment, while Lao PDR and Zambia pilot regularisation reforms still lacking financial recognition.
3. Weak investment pipelines: Most countries lack structured, bankable projects. Zambia, Lao PDR, and PNG show promising out-grower and plantation schemes, but insufficient aggregation, risk assessment, and business-development capacity prevent scaling and restrict eligibility for blended or private finance participation.
4. Limited financial sector engagement: Domestic banks in Central Africa and Southeast Asia perceive forestry as high-risk. In Cameroon, DRC, and Laos, collateral requirements and long payback periods deter SME lending, highlighting the need for de-risking tools and tailored credit facilities.
5. Governance and institutional fragmentation: Weak coordination among environment, finance, and industry ministries, notably in Congo Basin countries, delays fund disbursement and investor alignment. Absence of integrated governance frameworks undermines transparency, efficiency, and donor trust in national forest-finance mechanisms.
6. Absence of venture and accelerator ecosystems: Early-stage forest enterprises rarely access catalytic funding. Only Colombia and Gabon show emerging venture or accelerator initiatives, while Guyana and Suriname need technical assistance and incubation to strengthen investment readiness and attract impact capital.

Table 4 provides an overview of potential leverage points for development finance across each of the assessed countries, highlighting the opportunity for different support windows to scale forest enterprises and value chains.

Table 2: Blended Finance for Forest Value Chains & SMEs

Country	Instrument / Action	Type	Why	Likelihood
Cameroon	Impact finance for value chains	Blending; Guarantees; TA	Crowd in private SME capital	**Medium**
Colombia	Impact funds & blended PPPs	Blending; Guarantees; TA	Zero-deforestation agroforestry & timber	**Medium–High**
Suriname	SME/NWFP finance + ESG TA	Blending; TA	Build bankable MSME pipeline	**Medium–High**
Gabon	Blended capital for biodiversity SMEs	Blending; Guarantees; TA	De-risk PFNLs & ecotourism	**Medium**
Guyana	SME/NWFP value-chain finance	Blending; TA; Guarantees	Reduce raw log exports	**Medium**
Lao PDR	SME & value-chain blended finance	Blending; Guarantees; TA	Unlock large private potential	**Medium–High**
PNG	Value-chain & SME impact finance	Blending; Guarantees; TA	Shift away from round logs	**Medium**
Morocco	MSME investment grant facility	Blending; TA	Support cooperatives & SMEs	**Medium**
Zambia	Smallholder & plantation finance	Blending; Guarantees	Long-tenor capital needed	**Medium**

3.5 Carbon Markets / Carbon Finance

The carbon market for forests comprises compliance mechanisms under the Paris Agreement's Article 6 and voluntary carbon markets (VCMs) operating outside formal national registries. Both aim to mobilise finance for emission reductions and forest conservation, but differ in governance, integrity standards, and market integration.

Under Article 6, participating countries establish nationally determined contributions (NDCs) and may engage in cooperative approaches (Article 6.2) or mechanism-based trading (Article 6.4). For forest-related mitigation, this includes jurisdictional or national REDD+ programs, which quantify emission reductions through verified measurement, reporting, and verification (MRV) systems.

Countries such as Gabon, Colombia, Guyana, and DRC are developing national registries and approval procedures to ensure that carbon credits generated from forests are authorised for international transfer and fully integrated into national accounting frameworks. This approach reinforces environmental integrity and prevents double counting, linking results-based payments and carbon credit issuance to NDC implementation. Of the 11 countries surveyed, neither Cameroon nor Morocco have fully implemented carbon markets yet, but in both, the instrument was ranked as scalable, given the right conditions.

Effectiveness

Guyana represents the most advanced case, with an operational results-based payment architecture under the ART-TREES standard, mobilising over USD 150 million through verified carbon credits linked to its Low Carbon Development Strategy 2030. With that Guyana has delivered the first jurisdictional forestry credits, transferring USD 44 million directly to Indigenous Peoples' Local Communities for village investments. Colombia demonstrates high readiness, combining jurisdictional REDD+ programs and PSA Carbono under the RENARE registry, supported by mixed public, development, and market financing streams.

Gabon has proceeded with early carbon market implementation, maintaining a strong MRV and CAFI-linked frameworks but continues to face pacing and disbursement delays. Both DRC and the Republic of Congo possess REDD+ strategies and institutional structures supported by CAFI and GCF, though verified payments remain limited. Cameroon and Lao PDR

have advanced readiness frameworks but non-operational RBP mechanisms. Lao has mobilised USD 151 million through REDD+ and Emission Reduction Purchase Agreements (ERPAs), with over 80 percent of ERPA funds directed to communities.

Zambia and PNG report active pilot projects with community or landscape-level benefit-sharing models, while Morocco has no REDD+ system but is exploring carbon registry development. Other countries, including Suriname, have yet to receive high-dollar value payments from carbon markets, but have established the foundations for carbon finance at the national and sub-national levels. PNG recently received USD 63 million for results-based payments between 2014-16 from GCF.

Scalability

Reports consistently link scalability to the presence of enabling legal and regulatory frameworks, buyer confidence, and robust technical measurement, reporting, and verification (MRV) systems. Several countries, including Cameroon, Gabon, Morocco, and Zambia, continue to face incomplete or non-existent regulatory frameworks, constraining market development. In this context, any potential EU support should be contingent on adherence to EU integrity principles, the establishment of robust and transparent MRV systems, and the implementation of appropriate social and environmental safeguards. Such support should remain neutral with respect to specific voluntary carbon standards to avoid any implied endorsement.

Market scalability depends on continued interest from carbon buyers and the provision of reliable, high-quality carbon credits. In countries like Suriname and Cameroon, uncertainty about the legal recognition of carbon rights, limited technical capacity, and minimal experience with international trading mechanisms undermine potential buyers' confidence.

Conversely, Colombia and DRC demonstrate high scalability potential because structured programs link land-use activities with verified carbon reductions, enabling market participation from multiple sectors, including agriculture, forestry, energy, and waste. Guyana is negotiating Phase III of its REDD+ mechanism under Article 6 of the Paris Agreement; scaling could be facilitated by digital registries, transparent governance structures, and strengthened operational procedures that meet international market standards.

Gabon and Suriname lack frameworks for distributing revenues or ensuring community inclusion, which hinders transparent financial flows and equitable access. Guyana has made progress, yet independent reviews highlight uneven implementation of Free, Prior, and Informed Consent (FPIC) and gaps in grievance mechanisms. Morocco and PNG face land tenure and governance issues, which complicate the assignment of carbon rights and the negotiation of long-term agreements with local communities.

Reliable measurement, reporting, and verification (MRV) systems underpin the credibility and scalability of carbon markets. Countries such as Lao PDR highlight scalability potential if MRV systems are strengthened, and DRC similarly emphasises the importance of MRV across multiple sectors to expand impact and accuracy in credit issuance. Conversely, in countries with limited experience, such as Suriname and Cameroon, technical capacity constraints hinder the production of verified, market-ready credits.

Major bottlenecks

Expanding carbon finance faces several interconnected challenges:

1. **Policy and regulatory gaps** regarding carbon rights, project registration, benefit-sharing, and credit transferability.
2. **Price volatility** in international carbon markets.
3. **Limited technical capacity** for MRV and absence of functional registries in some countries.
4. **Land tenure insecurity and benefit-sharing gaps, particularly** when there are insufficient secure land or resource rights and unclear mechanisms for Indigenous Peoples and local communities

Table 5 provides an overview of potential leverage points for development finance across each of the assessed countries, highlighting the opportunity for different support windows to scale carbon finance instruments.

Table 3: Carbon Finance (REDD+, Article 6, ART-TREES, Carbon Markets)

Country	Instrument / Action	Type	Why (from report)	Likelihood
Cameroon	Enable carbon markets (legal, MRV, safeguards)	TA; Blending; Guarantees	Unlock markets with integrity and equity	**Medium** – systems not yet in place
Colombia	Private carbon & jurisdictional REDD+	TA; Policy; Blending	Proven effectiveness in Indigenous territories	**Medium** – regulatory progress needed
Suriname	Carbon credits & ITMOs	Blending; TA; Guarantees	Builds on REDD+ readiness; needs rights clarity	**Medium**
Gabon	Carbon/climate finance readiness	TA; Policy	Tier-3 MRV exists; legal gaps remain	**Medium**
Guyana	Scale ART-TREES / REDD+	Blending; TA	>USD 150M mobilised; strong MRV	**High**
Lao PDR	Scale ERPA readiness	TA; Policy; Blending	Initial ERPA success; expansion possible	**Medium**
PNG	Scale REDD+ / Article 6	Blending; TA; Policy	Transition from log exports	**Medium**
Morocco	Carbon market readiness roadmap	Policy; TA	Unlock results-based finance	**Medium**

Table 4: Overview of forest finance instruments

Instrument	Coverage across countries	Effectiveness (as evidenced)	Scalability (as assessed)	Major bottlenecks / gaps
Public finance	Widely evidenced across countries as a core source of forest finance	Generally **moderate**: effective for core functions (administration, protection, MRV), but often insufficient to close financing gaps on its own	**Moderate**: scope for scaling through fiscal reforms, green budgeting and blending with private finance	Constrained fiscal space; competing budget priorities; weak enforcement of fiscal measures; limited inter-agency coordination; uneven MRV and expenditure tracking
National Forest Funds / Conservation Trust Funds	Evidenced in several countries; planned or emerging in others	**Good** where operational: enable longer-term financing, pooling of sources, and clearer governance	**Good potential**: can act as platforms to channel public, donor and private finance	Under-capitalisation; dependence on political priorities; governance and transparency risks; limited built-in inclusivity in some cases
Carbon markets / Carbon finance	Evidenced or under development in most countries	**Good**: consistently identified as a high-potential instrument, even where implementation is still emerging	**Good**: strong interest in scaling through jurisdictional or programmatic approaches	Regulatory and policy gaps; land tenure and benefit-sharing issues; high upfront MRV and safeguard costs; technical capacity constraints; market volatility
Payments for Ecosystem Services (PES) / incentives	Evidenced in a subset of countries; planned or piloted in others	**Good** at pilot level: positive conservation and livelihood outcomes where implemented	**Good**, when combined with public finance, forest funds or carbon finance	Reliance on short-term donor funding; weak legal frameworks; MRV capacity gaps; complex designs that can exclude Indigenous peoples and local communities
Forest value-chain finance	Evidenced in several countries; absent or limited in others	**Moderate**: promising results in specific cases, but uneven access and impact	**Good potential,** particularly through blended finance, impact investment and PPPs	SME capacity gaps; limited access to credit; certification and compliance costs; tenure insecurity; weak downstream infrastructure; limited coordination across actors

4

Nascent and immerging instruments: Constraints and opportunities

This section summarises four finance instruments that were less commonly reported across the surveyed countries: biodiversity markets, debt-for-nature swaps, green bonds or sustainability-linked loans, and impact finance. Each is described along with regulatory, market, and institutional factors influencing their application.

4.1 Biodiversity markets

Countries expressed interest in biodiversity markets, particularly those with high biodiversity. However, gaps in data availability, supportive regulatory frameworks, and market readiness remain.

Programmes like the EU-funded Sustainable Wildlife Management Programme are helping to develop biodiversity baselines in pilot countries, including Guyana, DRC, Cameroon and Zambia. For example, SWM Guyana is partnering with Map of Life to develop sophisticated MRV systems that combine data from traditional knowledge (TK), soundscapes, camera traps, and eDNA to track changes in biodiversity. Efforts are also ongoing to develop global biodiversity "indicators" that align with Targets 5 and 9 of the GBF; countries could use such indicators as a starting point to report on their NBSAPs.

Lessons from past experiences

No selected country has fully operationalised a biodiversity market. Nevertheless, there are a few pilot projects and experiences that could inform future biodiversity markets.

Gabon is engaging in early capacity development for biodiversity markets via Okala, a national coordination entity that has already submitted funding proposals for biodiversity mapping and feasibility studies to CAFI. It is also working with Nature+ and Rougier Gabon to build a scalable monitoring system for high-integrity biodiversity crediting, combining technologies like camera traps, bioacoustics, and eDNA, processed through an AI-powered platform. Plans are underway to partner with the Organisation for Biodiversity Credits (OBC) to explore a voluntary biodiversity credit scheme that rejects the logic of "offsetting" biodiversity loss, instead generating credits that investors could purchase to secure a measurable "gain" in biodiversity.

Cameroon is also building capacity for biodiversity markets through the NauturAfrica Initiative and GRAND TNS/GRAND MINKEBE projects, supported by the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and the European Forests Institute (EFI's) Natura Sud-Est project. And in PNG, the biodiversity offset initiatives for liquified natural gas (LNG) have already helped conserve significant biodiversity-rich areas; comprehensive assessments of the long-term effectiveness of these offsets and scalability are in progress.

Table 7 provides an overview of potential leverage points for development finance across each of the assessed countries, highlighting the opportunity for different support windows to strengthen biodiversity finance instruments.

Table 5: Instrument 3: PES & Biodiversity Credit Markets

Country	Instrument / Action	Type	Why	Likelihood
Suriname	REDD+ benefit-sharing & PES foundations	Policy; TA	Critical gap blocking legitimacy	**Medium**
Gabon	Biodiversity crediting pilots	Policy; TA; Blending	Legal basis exists; operational gap	**Low–Medium**
Guyana	Biodiversity credits & PES	Policy; TA; Blending	Monetise non-carbon ecosystem services	**Medium**
Lao PDR	PES framework & pilots	Policy; TA; Blending	Incentivise restoration & watershed services	**Medium**
Zambia	PES & biodiversity credit pilots	TA; Policy; Blending	Currently absent; link to REDD+	**Low–Medium**
Morocco	PES via National Forest Fund	Policy; TA; Blending	Community incentives for conservation	**Medium**

4.2 Debt-for Nature Swap

Debt-for-Nature Swaps (DNS) involve agreements where a portion of a country's external debt is reduced or restructured, with savings redirected to conservation or forest-related activities. Reports from the surveyed countries describe different experiences with this instrument.

The ratio of debt to GDP is a key determinant of a country's eligibility and the attractiveness of a swap to creditors -with a debt-to-GDP ratio above ~50–60% are often considered potential candidates. However, eligibility is not just about the number but dependant on the Debt Sustainability Analysis (DSA) conducted by the IMF and World Bank. A DNS is usually viable when the country is in or at risk of debt distress, but still has adequate fiscal and institutional capacity to manage the swap and deliver conservation commitments.

Lessons from past experiences

Gabon's 2023 debt-for-nature swap is the regional benchmark, that has not yet been replicated in any of the other countries. Country experiences highlight several factors shaping the use of DNS.

DNS rely on voluntary agreements between the lender and borrower, meaning certain countries may never have an opportunity to implement this finance instrument. Although Lao has a high public debt (over 108% of annual GDP), large portions are held by China, whose lending terms typically do not include conditions for transparent monitoring or environmental standards. Zambia is also currently unable to apply DNS because the ongoing IMF-ECF restructuring does not allow the country to negotiate these agreements.

Because DNS agreements are one-off initiatives, some reports argued they are not sustainable enough to merit the high transactional burden of multi-stakeholder negotiations. Morocco's report, for example, noted that the country should not prioritise DNS because its existing partnerships provide access to impact finance mechanisms that are arguably better suited to meet reforestation, agroforestry, and biodiversity targets.

However, it is important to note that there is a precedent in Colombia (FondoAcción) and Gabon (Blue Bond) to use DNS proceeds to seed long-term NFFs or CTFs, which go on to attract blended finance investors.

Governance requirements are often complex, involving multiple institutions and new structures to manage funds.

Box 1 Gabon Blue-Bond debt- for nature transaction

In 2023, Gabon executed a landmark Blue Bond debt-for-nature transaction, refinancing USD 436 million of existing Eurobond debt through a new USD 500 million sovereign bond. The operation, coordinated with The Nature Conservancy and underwritten by Bank of America, was de-risked by a USD 500 million political risk guarantee from the U.S. International Development Finance Corporation, enabling improved financing terms. The transaction is expected to generate USD 125–160 million in fiscal space over 15 years. Debt-service savings are legally earmarked for conservation via a dedicated, independently governed fund, financing marine protected areas, fisheries management, and ecosystem resilience, with third-party oversight and monitoring.

4.3 Green bonds / Sustainability-linked Loans

Green bonds are debt instruments issued to finance projects with positive environmental impacts, such as reforestation, renewable energy, or sustainable infrastructure. They provide investors with fixed returns while ensuring proceeds are transparently allocated to climate or biodiversity objectives, often verified through external sustainability standards or taxonomies.

According to the Climate Bonds Initiative (CBI), about 3% of labelled green bond proceeds in past years were attributed to the land-use sector (which includes forestry)3. While there has been an increase in total green bond issuance, land use (including forestry) over the last 10 years, the forest sector remains to be a tiny fraction. In 2024 out of USD 300 billion+ certified climate bonds, the "Forestry" sector accounted for only USD 109 million. The 2024 Forest Declaration Assessment report notes that finance flows for beneficial forest protection ("green" flows) from 2021-25 are just USD 29 billion total (averaging < USD 6 billion/year) compared with much larger "grey" flows (that harm forests)[4]

Maturity and Readiness

Green bond development across the assessed countries remains uneven, reflecting disparities in capital-market maturity, fiscal frameworks, and institutional capacity. Only Morocco, Colombia, and Gabon demonstrate operational readiness, while others remain in exploratory or conceptual phases.

Morocco and Colombia represent mature markets. Morocco's Sustainable Finance Roadmap and active Casablanca Stock Exchange listings, aligned with International Capital Market Association (ICMA) standards- have made it a regional leader in certified green and sustainability-linked bonds, though forestry and NTFP investments are not yet integrated.

Colombia has developed an established green bond market aligned with the ICMA Green Bond Principles. Since 2016, four financial institutions (Bancolombia, Bancoldex, Davivienda, and Banco de Bogotá) have issued green bonds, with a cumulative volume of €817 million. These issuances have mobilised private capital for renewable energy, sustainable transport, energy efficiency, green buildings, waste management, water treatment, and sustainable infrastructure. No green bond proceeds have been allocated to the forest sector, reflecting limited forest-specific pipelines and monetisation mechanisms.

Gabon shows emerging readiness, underpinned by its ***Fonds pour la Préservation de la Biodiversité et du Climat*** (FPBC) and a credible carbon-finance record. Domestic issuance is constrained by limited capital-market depth but feasible under a blended or regional CEMAC structure.

Zambia and Lao PDR are progressing toward readiness, piloting sustainable-finance strategies and ESG guidelines but requiring EFSD+/NDICI-GE de-risking and capacity support. Guyana, Suriname, Cameroon, Congo, DRC, and Papua New Guinea remain at a conceptual stage, with small financial markets, weak credit ratings, and no enabling taxonomies. Cameroon piloted a municipal-level issuance through the ***Société Métropolitaine d'Investissement de Douala*** (SMID), which Cameroon's SMID pilot demonstrates that sub-national green bond issuance can mobilise private and diaspora capital for sustainable urban and infrastructure projects when supported by credible governance and transparent reporting.

3 Zabel A (2023) Existing Resources for Forests. Section D: Global Forest Financing Facilitation Network (GFFFN) <https://www.un.org/esa/forests/wp-content/uploads/2023/06/MTR-D-Study-Existing-Resources-for-Forests.pdf>

4 Forest Declaration Assessment Partners. (2024). Special Report: Emergingforest finance instruments. Climate Focus (coordinator and editor).
Accessible at www.forestdeclaration.org.

Overall, green bonds hold significant potential to channel capital into forest and ecosystem-based projects, but most countries require policy alignment, regulatory reform, and market-building measures before large-scale issuance becomes viable. Nationally.

Table 8 provides an overview of potential leverage points for establishing/scaling green bonds in each of the assessed countries.

4.4 Impact Finance and Impact Investment

Five out of 11 countries claimed some type of impact finance or investment. Impact finance across reports emerged as one tool in the forest finance landscape. In theory, the instrument could blend concessional loans, sustainable forest funds, de-risking guarantees and private equity to attract capital and generate both financial returns and measurable environmental and social impacts.

However, private sector participation, investor confidence and effective de-risking mechanisms remain sparse. Most country experiences point to impact finance being imperfectly applied. For example, while many reports state that impact finance has not-yet been implemented (e.g. Gabon, Guyana), the use of blended finance platforms and blended NFFs or CTFs suggest that most countries are experimenting with partial forms of this instrument.

The ONE AMAZON Impact Fund is a private impact finance initiative launched during COP 28 in Dubai. It operates in Colombia with the objective of supporting the long-term conservation and restoration of the Amazon biome. The initiative combines three core components: (i) a capital investment fund, (ii) 30-year conservation agreements with landholders, and (iii) a foundation that supports conservation and community-based activities. The model incorporates the One Amazon Asset (OAA), a regulated digital, nature-backed asset linked to one hectare of land under conservation. Revenues generated from asset sales are allocated as follows: 15% to landholders, 70% to the impact fund, and 15% to ONE AMAZON for management and operational purposes.

The initiative is currently in a prospecting phase, targeting the conservation of 100,000 hectares with an estimated investment volume of approximately €88 million, and with a stated ambition to scale up to 1 million hectares.

At the time of preparation of the Colombia Country Appraisal Report, no verifiable third-party or primary sources were identified that clearly describe (a) the fund's funding architecture, including any downside-protection or first-loss mechanisms, or (b) the specific companies or projects in which the fund invests. Publicly available information on these aspects remains limited.

Table 6: Instrument 5: Green / Biodiversity Bonds

Country	Instrument / Action	Type	Why	Likelihood
Cameroon	Prepare green bonds & PPPs	Blending; Guarantees; Policy	Large-scale green investment	**Low–Medium**
Colombia	Green & biodiversity bonds	Blending; Guarantees	Active bond market	**Medium**
Gabon	Green bond pipeline (GGBI)	Blending; Guarantees; TA	Afforestation/agroforestry pipeline	**Medium**
Guyana	Sovereign green/forest bonds	Blending; Guarantees; Policy	Mobilise scale capital	**Medium**
Lao PDR	Forest-linked green bonds (explore)	TA; Blending	First non-forest green bond issued	**Low–Medium**
Zambia	Green bonds (e.g. ZANACO)	Blending; Guarantees; TA	Market appetite exists	**Medium**
Morocco	Green/biodiversity bond pipeline	Blending; Guarantees; TA	No current forest bond	**Low–Medium**

4.5 Lessons from past experiences

Many countries, including Morocco are working to address the gap of structured national platforms, gaining experience through their efforts to launch a national blended finance platform that will pool resources and MRV data, coordinate guarantees and develop bankable projects with explicit forest targets.

The lack of funding containers and regulatory frameworks limits market readiness. Gabon is preparing to launch the FPBG as a national platform for blended forest finance structuring, building on its original mandate to host the proceeds from the Blue Bond DNS.

International funding can help catalyse impact finance. In Guyana the Caribbean Corporate Investment for Resilience (CCIR) blends grants, technical assistance for SMEs and concessional loans up to USD 100,000 to strengthen disaster resilience for Guyana and other Caribbean countries. In Morocco, a EUR 100 million concessional loan plus EUR 5 million in technical assistance from AFD provided support for governance reform and participatory project management laid the foundations for increased public-private engagement. DRC launched its Blue Fund for the Congo basin in 2017, but it is still seeking financial resources to achieve operationalisation.

Other countries including Zambia, PNG and Suriname highlight the role of EFSD+, EDFI Carbon Sinks, the EIB and EU Forest Partnership resources to stimulate private investments, ecotourism and sustainable forest management.

Table 7: Overview of regulatory, market and institutional barriers for nascent and immerging forest finance instruments

Instrument	Regulatory	Market	Institutional	Overall Challenges
Biodiversity markets	● Missing legal frameworks ● Unclear benefit-sharing rules ● Underdeveloped MRV and accreditation systems	◐ Emerging global market; uncertain buyer demand ● Few accredited actors; no national registries ● Risk of corporate 'greenwashing'	● Limited MRV capacity and biodiversity expertise ◐ Need foundational biodiversity surveys ◐ Insecure land tenure complicates scaling	Fragmented systems; weak institutional capacity; high implementation risk
Debt-for-nature swaps	● Restricted under some IMF rules (e.g. Zambia) ◐ Complex legal/negotiation processes ● Missing frameworks to redirect savings	◐ Not easily scalable; limited to agreement terms ◐ Temporary financial solution ○ Modest benefits, especially for MICs	● Limited flexibility and community engagement ◐ Variable debt repayment capacity ◐ Dependence on partner cooperation	High transaction complexity; limited sustainability impact; constrained uptake
Green bonds / Sustainability-linked loans	● Lack of legal alignment with ICMA standards ● Requires sovereign credit rating ◐ Limited national green taxonomies	● Weak pipeline of bankable forest projects ◐ High transaction costs; TA needed ◐ Relies on ESG safeguards and donor guarantees	◐ Requires high-level finance ministry involvement ◐ Limited stock exchange frameworks ● Coordination gaps among actors	High entry barriers; complex setup; needs strong policy and donor support
Impact finance	● No national blending frameworks\ ◐ Legal gaps for concessional capital and guarantees	● Low investor confidence and poor governance ◐ Weak SME bankability and ESG compliance ● Limited risk management instruments	● Limited capacity and training for banks/ developers ◐ Fragmented initiatives; weak project pipelines	Fragmented landscape; needs de-risking tools and stronger coordination

● = Strong / Operational
◐ = Partial / Developing
○ = Weak / Incomplete

5

Baseline data and MRV systems

Baseline data and robust Monitoring, Reporting, and Verification (MRV) systems are critical to ensuring the credibility, transparency, and effectiveness of forest investments. Baselines establish reference points for quantifying environmental, climate, and biodiversity impacts, while MRV systems track, verify, and report results transparently. Together, they enable results-based management, strengthen accountability, and enhance investor confidence in blended finance. Strong baseline and MRV frameworks demonstrate value for money, align investments with policy goals, and help mobilise sustainable private capital for green and inclusive growth.

The country appraisals assessed the systems and capacities in place rather than data quality or availability. Across all countries, progress has been made in developing forest and carbon MRV systems, yet major gaps remain in data coverage, interoperability, and institutional coordination.

Gabon, Guyana, and Suriname show the most tangible advances in national forest monitoring—Gabon's SNORF and Guyana's ART/TREES framework provide credible carbon baselines. Colombia's RENARE system and national GHG inventory also offer strong carbon and biodiversity data infrastructure.

DRC and the Republic of Congo have partial MRV systems needing greater data consistency and technical capacity. Cameroon's MRV and biodiversity monitoring remain fragmented. Lao PDR and Zambia have advanced forest inventories but lack integrated biodiversity baselines. Morocco's MRV capacity is partial, with dispersed biodiversity data, while PNG's CCDA-led system is functional but needs better data sharing and biodiversity coordination.

Across all countries, biodiversity, social, and livelihood indicators are weakly integrated into MRV frameworks. Lao PDR, Zambia, and Morocco rely heavily on donor-driven systems with limited national ownership, while Cameroon, DRC, and Congo face fragmentation among forestry, environment, and statistics agencies.

Common bottlenecks include the absence of centralised data-sharing platforms, institutional fragmentation, and limited technical and financial capacity for sustained monitoring. Heavy reliance on project-based funding undermines data continuity and credibility for results-based finance.

While Guyana and Gabon illustrate that strong MRV systems can attract international carbon finance, most countries require targeted investment in interoperability, capacity building, and financial sustainability to achieve credible, transparent MRV systems aligned with Article 6 and EU environmental due diligence requirements (Table 6).

Table 8: Summary of status of MRV systems and monitoring data across countries, strictly based on country appraisal reports

Country	MRV overall	Climate / Carbon	Biodiversity	Socio-economic / Livelihoods
Cameroon	**Partial / Developing**	Informal logging sector complicates MRV; limited and fragmented data	**Weak / Incomplete** – No national quantification methodology; biodiversity information largely unavailable	**Weak / Incomplete** – No safeguards or livelihood MRV system evidenced
Colombia	**Strong / Operational**	SMByC and RENARE systems operational; robust safeguards and reporting under UNFCCC	**Partial / Developing** – Strong datasets exist, but biodiversity MRV not fully integrated into finance mechanisms	**Strong / Operational** – Recognised socio-environmental safeguards applied in PSA and conservation programmes
DRC	**Partial / Developing**	"Satisfactory" MRV under FCPF and UN-REDD; capacity constraints remain	**Partial / Developing** – Biodiversity baselines exist but are incomplete and uneven	**Partial / Developing** – Socio-economic indicators referenced but not systematised
Gabon	**Partial / Developing**	Tier 3 GHG MRV in place; carbon registry under development	**Weak / Incomplete** – Biodiversity monitoring exists but lacks standardised indicators and integration	**Weak / Incomplete** – No national livelihood baseline
Guyana	**Partial / Developing**	Tier 2 MRV system operational; transparency and registry gaps noted (GRIF)	**Partial / Developing** – Early-stage biodiversity MRV initiatives	**Weak / Incomplete** – Limited FPIC and community-level livelihood data
Lao PDR	**Partial / Developing**	Climate MRV largely donor-dependent; limited sub-national coverage	**Weak / Incomplete** – No consolidated national biodiversity database or indicators	**Weak / Incomplete** – Socio-economic indicators and land-tenure data incomplete
Morocco	**Strong / Operational**	National GHG inventories and climate reporting systems well established	**Strong / Operational** – Robust protected-area and species monitoring; habitat indicators limited	**Partial / Developing** – Socio-economic data exists but is outdated and inconsistently monitored
PNG	**Partial / Developing**	National Forest Monitoring System in place; interoperability and coverage gaps	**Weak / Incomplete** – Patchy biodiversity data; weak alignment with national targets	**Weak / Incomplete** – Weak socio-economic baselines; transparency gaps
Republic of Congo	**Partial / Developing**	"Satisfactory" MRV under FCPF and UN-REDD; still under development	**Partial / Developing** – Biodiversity information incomplete and project-based	**Partial / Developing** – Socio-economic MRV incomplete
Suriname	**Partial / Developing**	NFMS and FREL/FRL operational; limited real-time and results-based application	**Weak / Incomplete** – Basic protected-area mapping; limited species-level data	**Weak / Incomplete** – Weak socio-economic data for Indigenous Peoples, SMEs and forest communities
Zambia	**Weak / Incomplete**	Incomplete climate MRV data and systems	**Weak / Incomplete** – Incomplete biodiversity data	**Weak / Incomplete** – Incomplete socio-economic and livelihood data

6

Conclusion

Forest finance systems across the eleven assessed countries are evolving but remain structurally fragmented, characterised by parallel public, donor, and private initiatives that are predominantly project-based, short-term, and weakly anchored in national policy, budgetary, and monitoring frameworks.

This fragmentation limits predictability, increases transaction costs, and constrains the development of investable pipelines for the private sector. As a result, even where forest resources and market opportunities are significant, finance remains insufficiently aligned with national forest, climate, and biodiversity objectives. Strengthening coordination, scaling proven instruments, and aligning enabling conditions are therefore preconditions -not complements-for achieving both public objectives and private investment outcomes.

Across the assessed countries, private-sector investment in forest-based companies and industries remains uneven, shallow, and highly context-dependent, reflecting the absence of coherent national forest finance systems rather than a lack of interest per se. In most countries, private engagement is confined to primary production, carbon projects, or donor-supported pilots, with very limited capital flowing into value-adding processing, sustainable forest management enterprises, or community-based forest businesses.

Only a small number of countries -most notably Colombia -show a more diversified pattern of private participation, enabled by stronger institutions, clearer rules, and functioning financial intermediaries, including green bonds and biodiversity instruments, impact funds, blended finance vehicles, and partnerships supporting forest and agroforestry value chains. In several forest-rich countries such as Gabon, Morocco, Lao PDR, and Suriname, private investment potential exists but remains underutilised due to persistent risks related to land tenure, legality, market access, and the credibility of MRV systems.

In higher-risk contexts, including PNG, Zambia, and parts of Central Africa, private investment remains minimal, reflecting governance and country risk, weak financial intermediation, and limited SME readiness. Taken together, the country evidence indicates that private capital will not scale organically in forest-based industries without deliberate systemic change.

Across countries, a systemic transformation in forest finance would therefore involve a shift from isolated financing instruments toward integrated national forest finance ecosystems that reduce risk, increase predictability, and align incentives for private investors. This includes clearer and more coherent policy and regulatory frameworks linking forest objectives to fiscal policy, climate strategies, and biodiversity commitments; stronger public institutions capable of coordinating finance across sectors and levels of government; and national platforms-such as forest or biodiversity funds -that can pool resources, manage risk, and channel finance over longer time horizons.

Rather than multiplying new instruments, transformation requires embedding forest finance within broader financial systems, including national budgets, financial-sector regulation, and development planning, so that private investment decisions are supported by consistent rules, data, and signals.

The country evidence further shows that targeted

development finance engagement is essential to trigger this transformation. Blended finance, guarantees, and other de-risking instruments are critical to crowd in private capital where structural risks remain high, particularly in forest value chains, restoration, and emerging bioeconomy activities. Public and concessional finance can be used more strategically to absorb early-stage risks, support pipeline and SME development, and strengthen Monitoring, Reporting and Verification (MRV) systems that underpin results-based finance and investor confidence. At the same time, institutional support is required to address core constraints - such as unclear land and carbon rights, weak benefit-sharing mechanisms, and limited transparency—that consistently deter private investment across countries.

Finally, a systemic transformation requires a strong and sustained technical assistance approach, without which increased financial flows are unlikely to translate into durable outcomes. Across countries, gaps in MRV systems-particularly for biodiversity and livelihoods-limited financial literacy, weak project preparation capacity, and incomplete safeguards implementation undermine both the credibility and inclusiveness of forest finance. Technical assistance is therefore indispensable to ensure that finance mobilised for forest-based companies and industries reaches forest-dependent communities and Indigenous Peoples, supports equitable benefit-sharing, and delivers measurable climate, biodiversity, and livelihood results.

When embedded within an integrated forest finance system, such an approach increases confidence among public and private financiers alike and ensures that private-sector investment contributes meaningfully to reversing deforestation, forest degradation, and biodiversity loss, rather than merely increasing financial activity.

Annexes

Annex I. Recommendations per country based on individual country appraisals

Cameroon

Key forest finance recommendations

- Redesign the National Forest Fund into a secured, open-governance Forest Trust Fund; use it to finance MRV, inventories, and as de-risking capital (two main options: 1.Reform and adapt existing National Forest Fund or 2. transform it into a Forest Trust Fund with an open governance)
- Earmark and strengthen 'green taxation' (forestry/environmental taxes) to capitalise the NFF/Trust Fund with transparent traceability.
- Enable carbon & biodiversity markets: legal framework, robust MRV, upfront financing, safeguards, and fair benefit-sharing.
- Develop impact finance for forest value chains with guarantees/fiscal incentives and bank information improvements.
- Prepare for green bonds and PPPs for large green investments; improve business climate and guarantees.

Table 1: Cameroon entry points for development finance to scale forest finance

Instrument / Action	Type	Why (from report)	Likelihood (H/M/L) & reason
Reform and adapt National Forest Fund or transform it into a Forest Trust Fund	Blending; Guarantees	Long-term vehicle to pool public/private funds and de-risk projects.	High – builds on existing fund & tax streams noted in report.
Earmark green taxation into the Fund	Policy Support; Blending	Domestic revenue source; calls for traceability and governance.	High – taxes exist; focus is on channeling/traceability.
Operationalise carbon/ biodiversity markets (legal, MRV, safeguards)	TA; Guarantees; Blending	Instrument mix needed to activate markets and equitable sharing.	Medium – strong potential, dependent on new systems.
Impact finance for value chains with guarantees	Guarantees; Blending; TA	To crowd in private capital to forest SMEs/value chains.	Medium – attractive with de-risking; current constraints remain.
Green bonds & PPPs	Guarantees; Blending; Policy	Requires pipeline, regulation, and credit enhancement.	Low–Medium – contingent on enabling steps identified.

Colombia

Key forest finance recommendations

- Scale green credits for conservation/restoration with carbon credits via BAC/FINAGRO and the Fondo para la Vida y la Biodiversidad (FVB).
- Mobilise impact funds and blended PPPs for agroforestry (coffee, cacao, rubber) and timber/NTFP value chains (zero-deforestation).
- Advance private carbon projects and jurisdictional REDD; develop regulation and social safeguards.
- Leverage Green & Biodiversity Bonds with guarantees to grow forest allocation.
- Use FVB/FONAM/SGR as platforms (incl. BAC RePro credit).
- Reinstate industrial forestry incentives (e.g., CIF) to expand plantations.

Table 2 Colombia entry points for development finance to scale forest finance

Instrument / Action	Type	Why (from report)	Likelihood (H/M/L) & reason
Green credits for restoration + carbon (BAC/FINAGRO + FVB)	Blending; Guarantees; TA	Existing banks/funds and track record with PSA/carbon.	High – institutions and pilots exist; pipeline referenced.
FVB & national funds as platforms (incl. RePro credit)	Blending; TA	€282M portfolio; 5 strategic lines; planned BAC credit.	High – operational fund and pipeline.
Impact funds & blended PPPs for value chains	Blending; Guarantees; TA	PPPs effective; align with zero-deforestation markets.	Medium–High – strong alignment; needs pre-investment support.
Private carbon & jurisdictional REDD (regulation, safeguards)	TA; Policy; Blending	Effective in indigenous areas; needs norms/benefit-sharing.	Medium – contingent on regulatory progress.
Green & Biodiversity Bonds with guarantees	Guarantees; Blending	Bond market active since 2017; biodiversity bonds emerging.	Medium – uptake for forests improves with de-risking.
Reinstate CIF for industrial forestry	Policy; Blending	CIF unfunded; needed to reach plantation targets.	Low–Medium – depends on political decision.

Suriname

Key forest finance recommendations

- Legalise and operationalise REDD+ benefit-sharing (carbon rights, inclusive governance, equitable distribution).
- Establish sustainability-linked loans/green credit lines tied to FSC/ESG performance.
- Strengthen SME/NWFP value-chain finance with TA, ESG readiness, aggregation.
- Advance carbon credits/ITMOs with clear benefit-sharing and MRV; consider platforms (e.g., digital MRV).
- Explore debt-for-nature swap to fund forest protection and community forestry.

Table 3: Suriname entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
REDD+ benefit-sharing (carbon rights; governance)	Policy; TA	Critical gap limiting REDD+ legitimacy and access to markets.	Medium – strong need identified; requires legal change.
Sustainability-linked loans / green credit lines	Blending	Encourages ESG (e.g., FSC), emission cuts, reforestation.	Medium – depends on bank capacity and TA.

continued on next page

Table 3: Continued

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
SME/NWFP value-chain finance + aggregation & ESG TA	Blending; TA	Builds pipeline and bankability for MSMEs.	Medium–High – strong potential with TA and blended funds.
Carbon credits & ITMOs with benefit-sharing & MRV	Blending; TA; Guarantees	Leverages existing REDD+/MRV; needs rights and safeguards.	Medium – readiness improving; legal clarity needed.
Debt-for-nature swap	Policy; Blending	Frees fiscal space for conservation/community forestry.	Medium – contingent on creditor appetite and framework.

Gabon

Key forest finance recommendations

- Support fiscal reform aligned with forest priorities (revise taxes/fees, biodiversity budget tagging, remove perverse subsidies).
- Strengthen readiness for carbon/climate finance (decrees under climate law, benefit-sharing, social/biodiversity MRV).
- Structure a forest-sector green bond pipeline for GGBI engagement.
- Operationalise biodiversity crediting (registry, MRV protocols) and pilot issuance.
- Mobilise blended/impact capital for biodiversity-positive SMEs and community ventures.

Table 4: Gabon entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Forest-aligned fiscal reform	Policy; TA	Incentivises SFM; addresses perverse subsidies and tagging.	Medium – reforms identified but require political follow-through.
Carbon/climate finance readiness (decrees, MRV, sharing)	TA; Policy	Tier-3 reporting; need legal clarity and co-benefit MRV.	Medium – strong basis; gaps in frameworks slow private uptake.
Green bond pipeline (GGBI)	Blending; Guarantees; TA	Prepare investable portfolio (afforestation, agroforestry).	Medium – needs pipeline and de-risking/standards.
Biodiversity crediting (legal to operational)	TA; Policy; Blending	Law exists since 2014; registries/ MRV not yet in place.	Low–Medium – early stage; pilots recommended.
Blended capital for biodiversity-positive enterprises	Blending; Guarantees; TA	De-risk investable models (PFNLs, ecotourism).	Medium – hinges on aggregation and risk-sharing.

Guyana

Key forest finance recommendations

- Improve and capitalise the Forest Finance Revolving Fund (FRF) using NRF and carbon revenues.
- Develop biodiversity credits and PES to monetise non-carbon ecosystem services.
- Scale ART-TREES/REDD+ carbon finance with transparent safeguards and benefit-sharing.
- Launch forest value-chain finance for SMEs/NWFPs with TA and logistics upgrades.
- Create community forest finance windows linked to GRIF/ART-TREES; simplify access.
- Consider sovereign green/forest bonds once project pipeline is ready.

Table 5: Guyana entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Scale carbon finance (ART-TREES/REDD+)	Blending; TA	Proven track record; >USD 150M mobilised; expand with safeguards.	High – established MRV and transactions; improve transparency.
Strengthen & capitalise FRF (incl. NRF share)	Blending; Policy	Centralise long-term funding for protected areas/restoration/ Indigenous peoples and local communities support.	Medium–High – institutions exist; needs allocation decisions.
Biodiversity credits & PES	Policy; TA; Blending	New revenue in carbon-light areas; requires MRV/benefit-sharing.	Medium – high potential; legal/ registry work needed.
Value-chain finance for SMEs/NWFPs	Blending; TA; Guarantees	Boost processing, reduce raw log export, grow SMEs.	Medium – requires SME credit lines and TA.
Community forest finance windows	Blending; TA	Direct support to Indigenous peoples and local communities /community forestry and VSPs.	Medium – success with simplified rules and literacy support.
Sovereign green/forest bonds	Blending; Guarantees; Policy	Mobilise scale capital for landscapes.	Medium – depends on creditworthiness and pipeline.

Lao PDR

Key forest finance recommendations

- Recapitalise and reform national funds (EPF/FPF) as core intermediaries aligned with fiscal policy.
- Develop PES framework and pilots to incentivise restoration and conservation.
- Scale carbon finance/ERPAs and readiness (rights, registry, safeguards).
- Blended finance for SMEs and forest value chains; crowd-in private investment.
- Scale the 'Khammouane Green Growth' model as an integrated landscape finance platform.
- Explore biodiversity credits and forest-linked green bonds as pipeline matures.

Table 6: Lao PDR entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Reform & capitalise EPF/ FPF	Blending; Policy	Existing funds under-capitalised; need mandates/governance.	High – platforms exist; reform is within reach per report.
Scale Khammouane Green Growth platform	Blending; TA	Proven provincial model integrating production & protection.	High – cited as scalable model in report.
PES framework & pilots	Policy; TA; Blending	Creates incentives for communities and watershed services.	Medium – early stage; needs MRV and benefit-sharing.
Scale carbon finance/ERPA readiness	TA; Blending; Policy	Initial ERPA results; expand with clear rules and safeguards.	Medium – momentum exists; legal clarity needed.
Blended finance for SMEs/ value chains	Blending; Guarantees; TA	Unlock several billions of private potential in forestry/ecotourism.	Medium–High – strong need; requires TA and risk-sharing.
Biodiversity credits & forest bonds (exploration)	TA; Blending	Emerging instruments; first domestic green bond (non-forest) issued.	Low–Medium – nascent for forestry; pipeline to be built.

Zambia

Key forest finance recommendations

- Improve enabling business environment (permits, tenure clarity, bankable JV/PPP models).
- Operationalise the Forest Development Fund (FDF); strengthen revenue collection/retention.
- Repurpose harmful subsidies and strengthen Environmental Liability compensation funding.
- Transform charcoal value chains towards legality/sustainability with alternative energy/livelihoods.
- Start private smallholder forestry & industrial plantations via blended finance with long tenors.
- Issue green bonds for forest conservation, afforestation, and reforestation (e.g., via ZANACO).
- Develop PES and biodiversity credit pilots linked to restoration/REDD+.

Table 7: Zambia entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Enable business environment & JV/PPPs	Policy; TA	Private sector constrained by high rates and regulatory hurdles.	Medium – actionable reforms identified in report.
Operationalise FDF & strengthen revenue systems	Policy; Blending	Fund established but inactive; revenue potential >USD 20M/yr.	Medium–High – within mandate; requires MOF alignment.
Repurpose subsidies & fund environmental liability	Policy	Align fiscal tools with forest outcomes; strengthen compensation.	Medium – policy-dependent but targeted.
Transform charcoal value chains	TA; Blending; Policy	Key to reducing deforestation; needs energy alternatives and livelihoods.	Medium – complex but central to outcomes.
Blended finance for smallholders & industrial plantations	Blending; Guarantees	Capital-intensive, needs long tenor and de-risking; JV models.	Medium – viable with guarantees and pipeline.
Green bonds for forest investments (e.g., ZANACO)	Blending; Guarantees; TA	CEC bond shows market appetite; bank exploring forest bond.	Medium – contingent on pipeline and standards.
PES & biodiversity credit pilots	TA; Blending; Policy	Currently absent; combine with carbon/restoration projects.	Low–Medium – early stage; requires legal/registry setup.

Papua New Guinea

Key forest finance recommendations (from report):

- Scale carbon finance (REDD+, Article 6/ART-TREES) with integrity MRV and benefit-sharing.
- Establish/Capitalise PNG Biodiversity & Climate Fund as a domestic conduit for forest finance.
- Simplify/realign forestry taxes & levies; consider a deforestation levy to shift incentives.
- Explore a debt-for-nature swap to create fiscal space for conservation.
- Adopt green taxonomy/budget tagging; prepare green/sustainability-linked loans/bonds.
- Develop value-chain/SME finance and impact investment with risk-sharing mechanisms.

Table 8: PNG entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Scale carbon finance (REDD+/Article 6)	Blending; TA; Policy	Window to transition away from round log exports; needs MRV/ rights.	Medium – potential high; depends on legal clarity and integrity.
PNG Biodiversity & Climate Fund (domestic trust)	Blending; Guarantees; Policy	National conduit to pool funds and de-risk private projects.	Medium–High – concept identified; governance design needed.

Table 3: Continued

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Tax/levy reform incl. deforestation levy	Policy; TA	Realign incentives; reduce leakage and malpractice.	Medium – requires reform and enforcement capacity.
Debt-for-nature swap	Blending; Policy	Could fund PAs and community forestry; depends on creditors.	Medium – contingent on macro context and creditor interest.
Value-chain/SME finance & impact funds	Blending; Guarantees; TA	Shift from log exports; build processing and SME ecosystem.	Medium – requires TA, logistics, and risk-sharing.
Value-chain/SME finance & impact funds	Blending; Guarantees; TA	Shift from log exports; build processing and SME ecosystem.	Medium – requires TA, logistics, and risk-sharing.

Morocco

Key forest finance recommendations

- Create a National Forest Investment Platform to coordinate finance solutions.
- Set up forest-specific blended finance windows with guarantees for risk-sharing.
- Operationalise PES through the National Forest Fund (NFF) with MRV and benefit-sharing.
- Adopt a carbon market readiness roadmap (rights, registry, pipeline).
- Launch an MSME investment grant facility linked to local financial institutions.
- Prepare a green/biodiversity bond pipeline aligned to ICMA; develop MRV for proceeds.
- Design climate taxation earmarked for ecosystem investment.

Table 9: Morocco entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
National Forest Investment Platform	Blending; TA	Addresses fragmented funding; strengthens coordination.	High – institutional setup feasible per report.
Forest-specific blended finance with guarantees	Blending; Guarantees	De-risks and scales investments for restoration/value chains.	Medium–High – instrument match to barriers identified.
PES via NFF (MRV & benefit-sharing)	Policy; TA; Blending	Incentivises community restoration and conservation.	Medium – requires legal/MRV build-out.
Carbon market readiness roadmap	Policy; TA	Unlocks results- and market-based finance.	Medium – clear steps mapped; needs execution.
MSME investment grant facility	Blending; TA	Addresses under-capitalised cooperatives and access to credit.	Medium – relies on delivery systems and TA.
Climate taxation for ecosystems	Policy	Creates domestic revenue stream for forestry.	Medium – requires fiscal modelling and coordination.
Green/Biodiversity bond pipeline	Blending; Guarantees; TA	No current fixed-income instrument; pipeline + ICMA alignment.	Low–Medium – depends on project pipeline and capacity.

Republic of the Congo

Key forest finance recommendations

- Reinforce governance and operations of the Forest Fund; ensure transparent use of forestry taxes. A possibility to establish a Forest Trust Fund if the reform of the existing NFF is not feasible.
- Establish a legal and operational framework for Payments for Ecosystem Services (PSE) (Article 6.8).
- Develop biodiversity credit framework (legal basis, methodologies, registry).
- Prepare for carbon markets and finance (Articles 6.2/6.4): legal decrees, MRV, benefit-sharing.
- Mobilise impact finance vehicles (e.g., blue/green funds) with clear eligibility and oversight.

Table 10: Republic of the Congo entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Strengthen Forest Fund governance & capacity	Policy; Blending	Central instrument fed by forestry taxes; governance gaps highlighted.	Medium – achievable with targeted governance reforms.
Legal framework for PSE (Art. 6.8)	Policy; TA	Operationalise non-market mechanisms for conservation results.	Medium – depends on passage of legal instruments.
Carbon market readiness (Art. 6.2/6.4)	Policy; TA; Blending	Leverage carbon to fund conservation; credibility/MRV essential.	Medium – hinges on integrity systems and decrees.
Impact finance vehicles (blue/green funds)	Blending; Guarantees	Stakeholders expect impact funds; need eligibility/oversight.	Medium – viable with governance and pipeline clarity.
Biodiversity credits framework	Policy; TA; Blending	Diversify economy and channel private funds to conservation.	Low–Medium – embryonic; needs standards and registry.

Democratic Republic of the Congo

Key forest finance recommendations

- Improve and restructure the National Forest Fund; revise forestry taxes and strengthen fund governance.
- Institutionalise PES with legal basis (Article 6.8) and pilots for measurable conservation outcomes.
- Develop biodiversity credits (legal framework, methodologies, registry).
- Scale carbon markets/finance (Articles 6.2/6.4) with robust MRV and benefit-sharing.
- Leverage existing funds with clear rules and government commitments.

Table 11: DRC entry points for development finance to scale forest finance

Instrument / Action	Type	Rational	Likelihood (H/M/L) & reason
Restructure & strengthen National Forest Fund	Policy; Blending	Can significantly increase revenues if governance improved.	Medium – within government remit; needs transparency reforms.
Institutionalise PES (Art. 6.8) with pilots	Policy; TA; Blending	Create verified/measurable conservation incentives.	Medium – dependent on legal acts and MRV.
Carbon markets/ finance (Art. 6.2/6.4)	Policy; TA; Blending	High potential given forest stock; requires integrity systems.	Medium – readiness advances with legal/MRV steps.
Mobilise impact funds (Okapi, GCF, Blue Fund)	Blending; Guarantees	De-risking needed to attract impact finance; need bankable pipeline and oversight.	Medium – feasible with structured pipeline and governance.
Biodiversity crediting framework	Policy; TA; Blending	Channel private finance to biodiversity outcomes.	Low–Medium – early stage; standards/registry needed.

Annex II. Overview of main public, private and international finance sources

Note: The figures and data below are not intended for cross-country comparisons. They are provided solely to give an order of magnitude of financial gaps at the individual country level.

Table 1. Cross-comparison of main finance sources (public, private, international) by country

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Cameroon	International/Private *(not definitive)*	Source(s): State budget (MINFOF, MINEPDED), funded by taxes on forest exploitation; Focus: Sustainable forest management, protected areas, enforcement; Gaps: chronically insufficient - low political will to allocate the necessary public resources makes sustainable financing difficult	Source(s): Forest enterprises/logging; Focus: generally limited to infrastructure and reforestation investments to manage individual forest concessions. Gaps: Need investement for infrastructure modernisation (dated sawmills, wood processing infrastructure)	Source(s): AFD, UE, BM, GEF, KFW, USFS and others; Focus: Sustainable forest management, Forest protection, Protected areas and conservation; Gaps: Insufficient - Progressive disengagement of certain donors threatens forest financial stability in the country, which is reliant on short-term, donor-funded projects	Est. 3.8 billion (CFA?) - largest gaps in reforestation/degraded ecosystem rehabilitation and assisted forest regeneration.

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Colombia	Public	Source(s): Three national funds - the National Environmental Fund (FONAM) (EUR 300 million); General Royalties System (SGR) (180 million); MOE's Fund for Life and Biodiversity (100-160 million/ year) - via various taxes; Focus: Sustainable forest management, protected areas and conservation; Gaps: Funding to incentivise forest based industries and carbon/ climate projects.	Source(s): Private companies investing in environmental compensation schemes, biodiversity bonds, impact investments, and voluntary carbon market projects; Focus: Needs in all areas	Source(s): Various programmes, including KfW's REDD+ Payment for Results schemes, EU, etc. Focus: focus on environmental programmes and technical assistance; Gaps: Cut of USAID programmes and prioritisation of European national defense/ migration issues creates an uncertain future for international forest funding. Also, as a middle income country (MIC), Colombia doesn't qualify for many of the programmes that lower-income countries do.	Est. EUR 32.8 billion - large gaps in all areas; unavailability of data makes it difficult to estimate costs
Congo (RoC)	International *(not definitive)*	Source(s): State budget, National Forest Funds, supported by various taxes on forest exploitation and products; Focus: Sustainable forest management, forest industries, forest protection, protected areas and conservation; Gaps: quasi-absence of state financing across all priority forest areas.	Source(s): Private sector makes up almost all investment in forest concessions and protected areas (through taxes?); Focus: Investment in all priority areas; Gaps: Needs in all areas	Source(s): COMIFAC, FC, FCPF, REDD+, FIP, CAFI, F2BC, FEVAC, FED, FVC, FEM/ GEF; Focus: Sustainable forest management, forest protection, protected areas and conservation, carbon projects; Gaps: Needs in all areas.	Est. FCFA 14 billion/year for sustainable forest management processes; FCA 35 billion/year to put in place yearly management plans for forest concessions. - Insufficient intersectional financing to reduce poverty and fight climate change through forest-sector reforms

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
DRC	International	Source(s): State budget and National Forest Fund; Focus: Needs in all areas; Gaps: State budget is very weak, as is the durability of pilot projects from international finance programmes (e.g. REDD+)	Source(s): Almost non-existant; Focus: Forest industries - primary processing through sawmills and log exports; Gaps: outdated industry infrastructure, moratorium on new forest concessions blocks arrival of new forest investments from the private sector, SME's lack access to credit.	Source(s): FIP for sustainable forest management, FONAREDD via CAFI, World Bank Carbon Funds, ONU, WWF, WCS, African Parks, and others; Focus: Almost all financial resources come from international aid and NGOs. Gaps: Needs in all areas	Est. hundreds of millions of USD - insufficient in all areas - especially protected areas and sustainable forest management - to several orders of grandeur to achieve national targets.
Gabon	International *(not definitive)*	Source(s): State budget via land taxes, timber export duties and area-based fees; Focus: sustainable forest management, forest protection, protected areas and conservataion; Gaps: Limited reach and inconsistent alignment of national budget with environmental objectives; no public funds earmarked for NTFP value chains or forest protection and limited biodiversity funding	Source(s): Public-private partnerships with entities such as ARISE IIP, Afreximbank, Africa Fianance Corporation Focus: Forest industries in the Nkok Special Economic Zone (SEZ); Gaps: "Largely untapped" due to a lack of access to long-term credit, the absence of financial de-risking instruments, and limited availability of green investment products tailored to forestry, biodiversity, or ecosystem services.	Source(s): CAFI/AFD, World Bank, GEF, bilateral donors such as Norway and France, FCPF; Focus: sustainable forest management, protected area management; Gaps: Fragemented or delayed donor support results in unmet operational needs for forest programmes.	Est. USD 57 million (USD 12-18 million/year) - Limited data in lieu of upcoming BIOFIN Finance Needs Assessment makes it nearly impossible to estimate largest gaps by priority area.

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Guyana	Public *(not definitive)*	Source(s): State budget via logging permit/export revenues, NTFP subsector revenues, Forestry Revolving Fund (FRF) Facility (to incentivise private sector); Focus: Public finance central to all priority areas; Gaps: Needs in all areas	Source(s): Small Business Bureau Credit Guarantee Facility, Institute of Private Enterprise Development (IPED)'s Logging Loan and the Guyana Bank for Trade and Insutry Limited (GBTI)'s Grow SME Fund Focus: Forest industries (e.g. EU-FLEGT Voluntary Partnership Agreement to improve sustainable forest management); Gap(s): Tools to incentivise private sector engagement are underutilised by operators; No dedicated vehicles or frameworks to channel private-equity, institutional-debt, or impact-investment capital into forestry.	Source(s): GRIF, ART-TREES, REDD+, GFC, WWF, Guyana Forest Value Creation Hub and others; Focus: Investment in all priority areas. Gaps: Need more long-term donor commitments in protected areas and carbon/biodiversity markets.	Est. USD 146.8 million/ year - largest gaps in protected area conservation and sustainable forest management.

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Lao PDR	Private	Source(s): State budget and National financing platforms such as the Environmental Protection Fund (EPF) and Forest Protection Fund (FPF); Focus: clearer mandates for national funds and establishing a forest finance coordination mechanism; Gaps: Critically underfunded (<USD 1 million/ year); high public debt (over 100% annual GDP) and over half owed to China limits public financing for forestry and increases reliance on external support.	Source(s): Sun Paper, VRG, Burapha, MTP, SilviCarbon (1.4 billion/ year); Focus: Forest industries and sustainable forest management through plantations, wood processing, carbon investments, and NTFP value chains; Gaps: Mechanisms for blended financing to achive national targets	Source(s): EU, BMZ, JICA, GEF, AFD, WB, Canada, ADB (USD 472 million); Focus: Sustainable forest management, protected areas management and conservation, forest protection; Gaps: SME financing and roadmap for NPA	Est. USD 4.8 billion - need for diversified financing from government, donors and the private sector.
Morocco	Public	Source(s): State budget from the Ministry of Agriculture, Maritime Fisheries, Rural Development, and Water and Forests (MAPMDREF); Focus: Investments across all priority areas; Gaps: unpredictable and insufficient allocations for sustained financing.	Source(s): None listed; Focus: Needs in all areas to develop a national blended finance platform; Gaps: Severe shortfalls in private sector investment	Source(s): AFD, EIB, AfDB, World Bank, EU, GIZ, Canada, JICA, Korea; Focus: Investments spread across all priority areas, but special focus on concessional loans and technical assistance; Gaps: Needs in all areas	Est. EUR 200-300 million - Primary gaps in sustainable forest management and inclusive forest industry development

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Papua New Guinea	International	Source(s): State budget; Focus: Investments across all areas; Gaps: state finance to support REDD+ and national submission to ART-TREES and LEAF Coalition for finance remains very limited; revenue from logging industry often does not get allocated to forest sector.	Source(s): Private companies; Focus: Forest industry - reduce reliance on raw log exports and increase export value; Gaps: Need to invest in local processing hubs, verified timber supply chains and NTFP value chains to diversity forest-based income streams; majority of land under community management makes private investment challenging.	Source(s): UN-REDD programme (significant support to develop PNG's REDD+ portfolio), WB's FCPF programme, the EU-FCCB project, ADB, GCF; Focus: Investments in all priority areas; Gaps: . WB technical support and support from the Asian Development Bank.	No overall gap indicated - priorities in REDD+ implementation
Suriname	International *(not definitive)*	Source(s): State budget; Focus: covers core infrastructure, training, resource assessments and information systems; Gaps: continues to rely heavily on donor support for TA and blended finance instruments to de-risk private investment.	Source(s): Private companies (unspecified); Focus: Forest industry; Gaps: minimal private-sector participation remains due to perceived investment risks, lack of de-risking mechanisms, and weak ESG (environmental, social, governance) infrastructure; local banks classify forestry as a "high-risk" sector - demand liquid collateral, excluding concession holders and most small operators.	Source(s): IDB, UNDP, GEF, Global Climate Change Alliance (phase 1-2), EU-Suriname Forest Partnership, EU-WWF-AFD (Sustainable Livelihood Facility), Conservation International Suriname; Focus: sustainable forest management, forest industry (bioeconomy and SME initiatives); Gaps:	No overall gap indicated - priorities in forest protection (enforcement, control and monitoring)

continued on next page

Table 1. Continue

COUNTRY	MAIN SOURCES	PUBLIC	PRIVATE	INTERNATIONAL	ESTIMATED FINANCE GAP ($ net over 5 years/ to 2030)
Zambia	International	Source(s): State budget from the Central Treasury through the Ministry of Green Economy and Environment (MGEE); Focus: primary investments in sustainable forest management; Gaps: budget allocations volatile and disproportional compared to other sectors; need for long-term state budget mechanisms for forestry.	Source(s): ZANACO bank and others, ZAFFICO PLC, BCP [British Carbon Partners]; Focus: Sustainable forest management (tree plantations, and restoration); forest industries (job creation); Gaps: need to strengthen/develop PPPs, sustainability-linked investments, derisking tools and green bonds	Source(s): EFSD+, EDFI, WB-IDA (TRALLARD II, GEF, CIF) and others; Focus: Investment across all priority sectors; Gaps: Reliance on donor funding leads to a "boom and bust financing cycle", which is not sustainable.	Est. USD 3.347 billion (or USD 557.8 million/year) - largest gaps in sustainable forest managment for forest restoration and tree plantations.

continued on next page

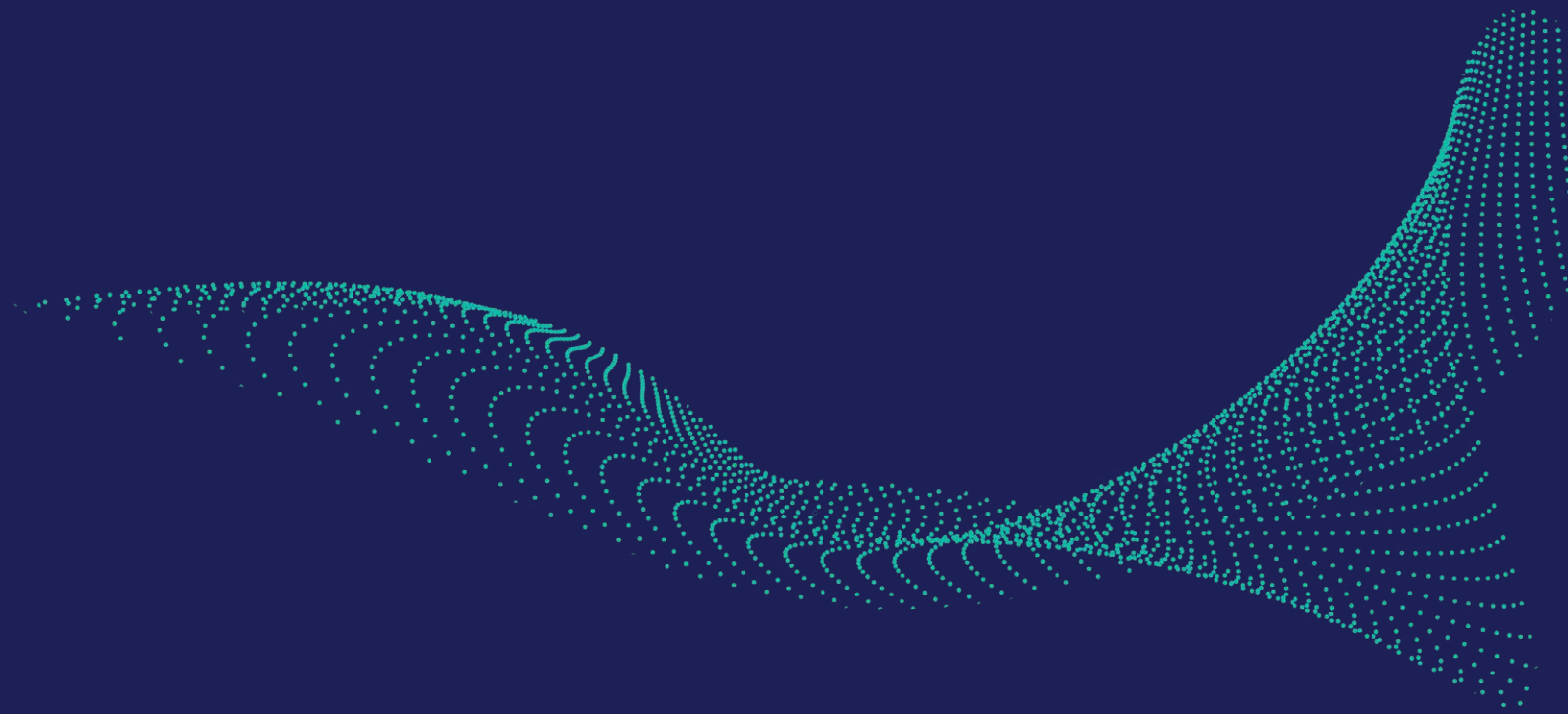
Annex III. Coverage matrix – Forest finance instruments by country

(Populated strictly from final country reports)

Forest finance instrument	PNG	Morocco	Guyana	DRC	Cameroon	Laos	Congo	Gabon	Zambia	Suriname	Colombia
Public finance (incl. fiscal reforms, green budgeting)	Not evidenced	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Payments for (Forest) Ecosystem Services / Incentives schemes	Not evidenced	Yes	Not evidenced	Planned	Not evidenced	Yes	Planned	Not evidenced	Planned	Planned	Yes
National Forest Funds / Conservation Trust Funds	Yes	Yes	Yes	Yes	Not evidenced	Yes	Yes	Planned	Planned	Planned	Yes
Debt-for-Nature Swap	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Yes	Not evidenced	Planned	Yes
Green Bonds / Sustainability-linked Loans	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Yes	Not evidenced	Not evidenced	Yes	Planned	Yes
Financial instruments for forest value chains (SMEs, concessions, outgrowers, etc.)	Yes	Not evidenced	Not evidenced	Not evidenced	Not evidenced	Yes	Not evidenced	Not evidenced	Not evidenced	Yes	Yes
Biodiversity markets (credits / certificates)	Not evidenced	Not evidenced	Not evidenced	Yes	Not evidenced	Not evidenced	Planned	Not evidenced	Not evidenced	Not evidenced	Yes
Carbon markets / Carbon finance	Yes	Not evidenced	Yes	Yes	Not evidenced	Yes	Planned	Yes	Yes	Yes	Yes
Impact finance / Impact investment (incl. blended finance, de-risking)	Not evidenced	Yes	Not evidenced	Yes	Not evidenced	Yes	Not evidenced	Not evidenced	Yes	Yes	Yes

Notes;

- Yes = instrument is implemented and evidenced in the country report.
- Planned = instrument is explicitly described as under design, piloting, or preparation in the country report.
- Not evidenced = instrument is not mentioned or no implementation evidence is provided in the country report.
- The matrix is compiled strictly from country reports; no extrapolation or cross-country inference has been applied.



A Global Gateway flagship initiative

For more info: INTPA-F2@ec.europa.eu
DG International Partnerships Unit F2 – Environment, Natural Resources, Water.
Sustainable Forests for the Future Group

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.