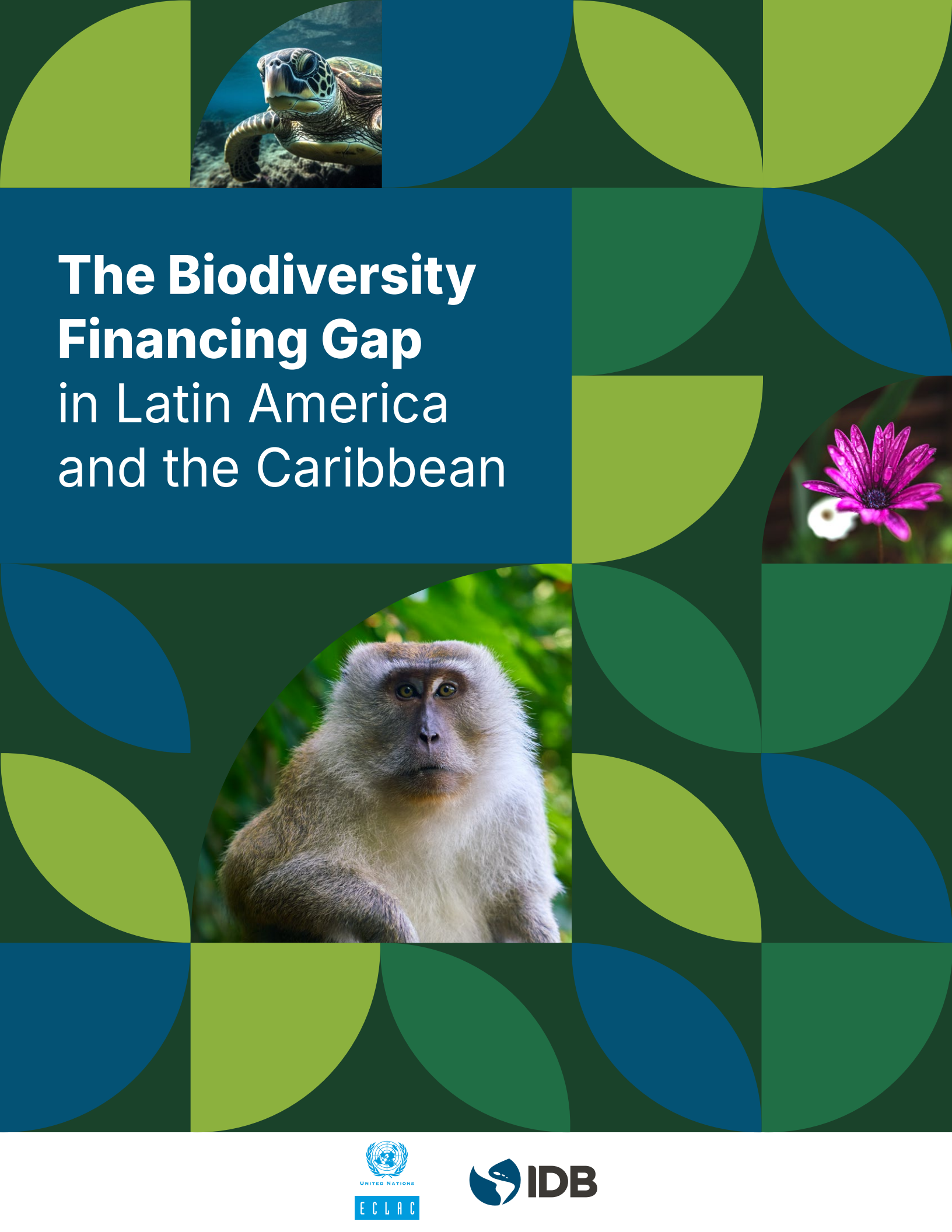


The cover features a dark green background with a repeating pattern of overlapping circles in shades of blue and light green. Three circular inset images are placed on the cover: a sea turtle in the top left, a pink flower in the middle right, and a monkey in the bottom center.

The Biodiversity Financing Gap in Latin America and the Caribbean

The Biodiversity Financing Gap in Latin America and the Caribbean

Needs, Flows, and Mobilization Strategies Toward 2030

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Acknowledgments

The team responsible for preparing this document would like to thank the individuals and institutions whose valuable comments and suggestions contributed to its review and further development. These contributions helped improve the document's technical consistency, scope, and overall quality. The individuals listed below are presented in alphabetical order within each institution.

The team is especially grateful for the comments of Andrew Deutz, lead author of the global study *Financing Nature: Closing the Global Biodiversity Financing Gap*, which served as a baseline reference for the development of this document, as well as for the contributions of Frida Díaz Almeyda of the UNEP World Conservation Monitoring Centre (UNEP-WCMC) as an external reviewer, which helped strengthen the study's analysis.

The team also thanks the following officials of the Economic Commission for Latin America and the Caribbean (ECLAC) for their comments: Santiago Lorenzo, Sustainable Development and Human Settlements Division; Mónica Rodrigues, Division of Production, Productivity and Management; Silvia Saravia, Natural Resources Division; Helvia Velloso, ECLAC office in Washington, D.C.; and Romain Zivy, ECLAC office in Buenos Aires.

Likewise, the team thanks Mariana Alfonso, Climate Change Solutions Division; Rodrigo Barra Hevia, Water and Sanitation Division; Juana Leal Simbaqueba, Housing and Urban Development Division; Luisa Lema Vélez, Agriculture and Rural Development Division; Nora Libertun de Duren, Housing and Urban Development Division; and Ernesto Monter Flores, Transport Division, of the Inter-American Development Bank (IDB), for their valuable comments.

Special thanks go to Camilo Quesada, an official at the ECLAC office in Bogotá, for his important contributions to the initial design of the exercise and for providing valuable inputs for the development of various components related to biodiversity financing needs.

Finally, the team thanks Diego Olarte Suárez, National Coordinator of the Biodiversity Finance Initiative (BIOFIN) of the United Nations Development Programme (UNDP) in Colombia, for his comments.

IDB Foreword

Latin America and the Caribbean is home to nearly 40% of the world's biodiversity. Its forests, oceans, wetlands, mangroves, reefs, and productive landscapes form an invaluable base of natural capital that supports productivity, competitiveness, food and water security, resilience, and long-term prosperity.

This natural wealth is also a strategic asset for the region's development. Protecting and investing in it can create new opportunities for sustainable growth. Realizing this potential will require mobilizing financing at a scale commensurate with nature's economic and social value.

In this context, the Economic Commission for Latin America and the Caribbean (ECLAC) and the Inter-American Development Bank (IDB) present this study, which provides a rigorous estimate of the financing gap for biodiversity conservation and ecosystem restoration in the region and offers evidence to inform policies, investments, and resource mobilization. It also reinforces a broader message: biodiversity financing is a development imperative, closely linked to economic growth, productive transformation, and resilience.

The findings are clear: annual biodiversity financing needs are estimated at US\$ 170.217 billion, while current flows total only US\$ 17.230 billion. But this gap can be narrowed through better policies, stronger institutions, and greater investment.

Public resources and international cooperation will remain essential, but they will not be sufficient. Expanding private-sector participation, strengthening blended finance mechanisms, promoting innovative financial instruments, and developing investable projects will all be critical. At its core, this effort requires incorporating the value of nature into economic and financial decision-making.

Latin America and the Caribbean is uniquely positioned to lead, combining exceptional biodiversity with growing innovation in sustainable finance. Instruments such as thematic bonds, payments for environmental services, and debt-for-nature conversions show how economic incentives can be aligned to protect natural capital. The challenge now is to scale these solutions and strengthen the institutions that support them.

I thank ECLAC for this valuable collaboration and the technical teams of both institutions for the rigor and dedication that made this study possible. The evidence and recommendations presented here provide an important foundation for accelerating the investments and actions needed to conserve, restore, and sustainably harness the region's natural capital.



At the IDB Group, we reaffirm our commitment to helping close the biodiversity financing gap and supporting countries by helping design policies, offering innovative financing solutions, and mobilizing investment. This commitment is reflected in initiatives such as Amazonia Forever and Ready and Resilient Americas, which help countries protect natural capital, strengthen resilience, and expand sustainable investment opportunities. The years ahead will be decisive in transforming the region's extraordinary natural wealth into a lasting source of wellbeing, opportunity, and prosperity, and the IDB Group is ready to help.

Ana María Ibáñez

Vice President for Sectors and Knowledge
Inter-American Development Bank



ECLAC Foreword

Latin America and the Caribbean is home to more than 40% of the world's biodiversity, despite accounting for approximately 16% of the planet's land area. This biodiversity forms the essential foundation of the region's natural capital. More than half of regional GDP comes from activities that are closely dependent on this natural capital, which also regulates the water cycle, contributes to global climate stability, and supports the wellbeing of millions of people. Nevertheless, the region faces constraints that prevent biodiversity from becoming a source of progress and opportunities.

This paradox reflects one of the structural challenges that the Economic Commission for Latin America and the Caribbean (ECLAC) has highlighted in recent years. The region faces a set of development traps characterized by low productivity growth, high levels of inequality, weak institutional capacity, and limited potential to mobilize the financial resources needed to drive transformations and address the challenges of the present century. In this context, the accelerated loss of biodiversity is not merely an environmental concern; it represents a growing threat to macroeconomic stability, competitiveness, food security, water availability, resilience to climate change, and the fiscal sustainability of our countries.

The evidence is increasingly compelling: the economies of Latin America and the Caribbean depend significantly on natural capital. However, economic incentives, investment decisions, and public policies continue to place insufficient value on the ecosystem services that underpin development. This disconnect has created a growing gap between the strategic importance of biodiversity and the resources allocated to its sustainable use, conservation, and restoration. Narrowing this gap is now a prerequisite for advancing toward a new development paradigm that combines economic growth, inclusive social development, and environmental sustainability.

This study, jointly prepared by ECLAC and the Inter-American Development Bank (IDB), makes a significant contribution to understanding the magnitude of this challenge in Latin America and the Caribbean. Its findings show that current financing flows cover barely one-tenth of the estimated needs for biodiversity conservation and restoration in the region, and that the estimated financing gap for protecting biodiversity in Latin America and the Caribbean is equivalent to 2.1% of regional GDP. However, beyond this quantification, the study provides a comprehensive perspective that links the conservation of natural capital with productive transformation, fiscal policy, financial regulation, and development planning. The analysis highlights that closing the financing gap will depend not only on mobilizing greater resources,

but also on realigning incentives, strengthening institutional and governance capacities, improving the quality of public and private investment, and incorporating nature as a central component of economic and policy decisions.

This perspective aligns with one of ECLAC's core arguments: the need to strengthen governance capable of driving sustained development processes. Institutions matter not only because they manage resources, but also because they create the enabling conditions to coordinate stakeholders, build consensus, guide long-term investments, and transform comparative advantages into competitive advantages. In the area of biodiversity, this entails developing the capacities and strategies needed to design coherent policies, coordinate across levels of government, strengthen territorial planning, generate reliable information, structure high-quality projects, and create conditions that enable the mobilization of public and private capital toward nature-positive investments over the medium and long term.

The region has a historic opportunity. Against an international backdrop marked by the transition to low-carbon economies, growing recognition of nature-related risks, and the search for more sustainable production models, biodiversity can become one of the main drivers of a new process of productive transformation. However, this will require moving beyond the view of conservation as a cost and toward an approach that recognizes it as a strategic investment and a pillar of development, capable of strengthening productivity, reducing risks, generating employment, attracting investment, and increasing the resilience of our economies.

The findings presented in this report show that the financing gap is substantial, but they also demonstrate that there are instruments, policies, strategies, and mechanisms with the potential to significantly reduce it when public policy, international cooperation, the financial system, and the private sector are appropriately coordinated. In this sense, the study not only identifies a problem; it also proposes a roadmap toward a financial architecture that addresses biodiversity challenges from a development perspective and resolves the trade-off between conservation and economic growth.

Natural capital and the biodiversity that underpins it represent one of the region's greatest strategic assets. Their sustainable use, conservation, and restoration are not a sectoral or purely environmental agenda. On the contrary, they are fundamental to strengthening competitiveness, improving people's wellbeing, and building more resilient economies in the face of the multiple uncertainties of the present. Consolidating this natural capital as a true driver of development will depend on the capacity of our countries to strengthen their institutions, mobilize resources at the scale required, and build agreements that place it at the center of national development strategies.

This report is published in the lead-up to COP17 of the Convention on Biological Diversity (CBD), to be held in October 2026 in Yerevan, Armenia, where countries will review, for the first time, collective progress toward implementing the Kunming-Montreal Global Biodiversity Framework.

We hope that this study will contribute to enriching this debate, strengthening public policy formulation in countries, and guiding investment decisions that help reconcile the economy with nature. Restoring biodiversity means not only protecting the region's natural capital; it also means expanding development opportunities for present and future generations and consolidating a sustainable growth model capable of generating prosperity within the planet's ecological limits. We thank the Inter-American Development Bank for its collaboration on this joint publication.

José Manuel Salazar-Xirinachs

Executive Secretary

Economic Commission for Latin America and the Caribbean (ECLAC)

Paulson Institute Foreword

I'm encouraged to see ECLAC and the IDB build on the analytical approach developed through the Paulson Institute's *Financing Nature* research to assess the biodiversity financing challenge in Latin America and the Caribbean. The region is home to some of the world's most important natural assets, which underpin economic growth, livelihoods, and resilience, yet they remain significantly underfunded. This report brings much-needed rigor to an issue that is often discussed in the region but too rarely quantified. By identifying the scale of the financing gap and highlighting practical opportunities to mobilize investment, it helps transform an abstract challenge into an actionable agenda.

Understanding the economics of nature is essential to making better decisions. What gets measured gets managed, and this analysis provides policymakers, financial institutions, businesses, and development partners with a stronger foundation for action. Protecting nature is not only an environmental necessity; it is fundamental to long-term economic prosperity and stability. The opportunity now is to use these findings to align incentives, scale investment, and accelerate the transition from commitment to implementation. The challenge is significant, but so too is the opportunity to build stronger and more resilient economies by investing in nature.

Henry M. Paulson, Jr.
Chairman
Paulson Institute

Acronyms

ANLA	National Authority for Environmental Licenses (Colombia)
BAU	Business as usual
BIOFIN	Biodiversity Finance Initiative
CAF	Development Bank of Latin America and the Caribbean
CBD	Convention on Biological Diversity
CC	Catch Control
CONAFOR	National Forestry Commission (Mexico)
COP	Conference of the Parties
CPI	Climate Policy Initiative
CRS	Creditor Reporting System (OECD)
CS	Catch Shares
DAC	Development Assistance Committee
ECLAC	Economic Commission for Latin America and the Caribbean
FAO	Food and Agriculture Organization of the United Nations
FELABAN	Latin American Federation of Banks
FINAGRO	Fund for the Financing of the Agricultural Sector (Colombia)
FONAFIFO	National Forestry Financing Fund (Costa Rica)
FUNBIO	Brazilian Biodiversity Fund
GBFF	Global Biodiversity Framework Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GSSS	Green, Social, Sustainability, and Sustainability-Linked Bonds
IAS	Invasive Alien Species

IDB	Inter-American Development Bank
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unreported, and Unregulated (Fishing)
KM-GBF	Kunming-Montreal Global Biodiversity Framework
MADS	Ministry of Environment and Sustainable Development (Colombia)
NbS	Nature-based Solutions
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Nongovernmental Organization
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OECM	Other Effective Area-Based Conservation Measures
OOF	Other Official Flows
PC	Payments with Production Requirements Referenced to Area, Number of Animals, or Current Income
PES	Payments for Environmental Services
PHR	Payments Based on Historical Production Required
PIF	Payments Based on On-Farm Fixed Capital Formation
PINE	Policy Instruments for the Environment (OECD database)
PIS	Payments Based on On-Farm Services
PIV	Payments Based on Variable Input Use
PP	Payments Based on Output
PSE	Producer Support Estimate
RAP-E	Special Administrative and Planning Region (Colombia)

REDD+	Reducing Emissions from Deforestation and Forest Degradation, plus the Conservation, Sustainable Management, and Enhancement of Forest Carbon Stocks
SDG	Sustainable Development Goal
SPI	Sustainable Productivity Index
SSP	Shared Socioeconomic Pathways
TFP	Total Factor Productivity
TNC	The Nature Conservancy
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-WCMC	UNEP World Conservation Monitoring Centre
WRI	World Resources Institute
WWF	World Wide Fund for Nature

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Introduction



The accelerated loss of biodiversity and the degradation of ecosystem services are eroding the economic foundations of development in Latin America and the Caribbean by deepening structural vulnerabilities and limiting the ability to sustain dynamic, resilient, and inclusive growth trajectories. In a region highly dependent on its natural capital,¹ the disconnect between productive development policies, land-use patterns, and the direction of financial flows has contributed to perpetuating development traps characterized by low growth capacity, high exposure to environmental and climate risks, and limited capacity for structural transformation. In this context, the gap between financing needs for the conservation, restoration, and sustainable use of biodiversity and the financing currently mobilized is not merely an environmental or budgetary challenge, but a central obstacle to reconfiguring production systems and thereby supporting a sustainable development trajectory in the region. Addressing this gap requires greater coherence among productive, fiscal, financial, and environmental policies, as well as steering public and private financing as a strategic instrument to align economic development with the conservation and sustainable use of natural capital.

This relationship is bidirectional. On the one hand, a significant proportion of economic activity depends on the continued provision of ecosystem services to sustain production, employment, and wellbeing. On the other hand, current production and consumption patterns are among the main drivers of biodiversity loss and the degradation of natural capital, progressively reducing the capacity of ecosystems to sustain those same economic activities. This feedback creates a vicious circle that simultaneously undermines biodiversity conservation and long-term development prospects.

This need for coherence and coordinated action has been recognized in the Kunming-Montreal Global Biodiversity Framework (KM-GBF), which establishes targets for 2030 aimed at halting and reversing biodiversity loss. Its implementation requires not only mobilizing additional resources, but also transforming the incentives and financial flows that shape production decisions (see Section 1.4).

Latin America and the Caribbean is home to nearly 40% of the world's biodiversity (IDB, 2024a) and encompasses some of the planet's most emblematic and important natural systems and biogeographic regions, such as the Amazon, the Andes, the Caribbean, and Mesoamerica. This natural capital underpins multiple productive activities and essential ecosystem services and plays a critical role both in global ecological and climate stability and in the region's economies. Among these functions, water plays a cross-cutting role, as it links agricultural production,

1. Throughout this document, the terms *biodiversity*, *natural capital*, and *nature* are used with distinct scopes. *Biodiversity* is the central concept of the analysis. *Natural capital*, understood as the set of natural resources from which goods, ecosystem services, and other benefits for people are derived, is broader in scope and includes biodiversity among its components. *Nature*, in turn, is used in a broad sense, particularly in expressions established in the international literature on policy, finance, and sustainable development.

energy, urban functioning, and territorial resilience. In a region marked by significant inequalities in availability and access, recognizing this role makes it possible to view biodiversity not only as a conservation agenda, but also as a prerequisite for water security and sustainable development (Bretas et al., 2020).

The annual value of ecosystem services in the Americas has been estimated at no less than US\$ 24.3 trillion,² equivalent to the continent's gross domestic product (GDP) in 2011 (IPBES, 2018). However, prevailing patterns of production and land occupation, particularly land-use change,³ have placed growing pressure on ecosystems, compromising their integrity and reducing their capacity to sustain long-term development.

Closing or significantly narrowing the biodiversity financing gap is essential to advancing toward nature-compatible development models and directing resources toward landscape transformation, ecosystem conservation and restoration, and the integration of biodiversity criteria into sectoral and territorial planning. Likewise, closing the financing gap depends not only on the availability of resources, but also on the governance conditions under which they are mobilized and invested. In line with the perspective of endogenous governance (Salazar-Xirinachs and Boeninger Sempere, 2026), governance is an inherent dimension of the design and implementation of financing policies (see Section 9.4).⁴

This document helps to fill this issue by estimating the financing gap for the sustainable use, restoration, and conservation of biodiversity in Latin America and the Caribbean, drawing on internationally used methodologies adapted to the region's productive, fiscal, and institutional context. The analysis links financing needs to current financial flows directed toward biodiversity and identifies public, private, and blended financing instruments to mobilize and redirect resources. The economic valuation of natural capital and the estimation of its effects on value added and employment are relevant to enriching the analysis, but fall outside the scope of this study and constitute areas for future research.

2. Monetary figures in this document follow the short scale, in which one billion equals one thousand million (10^9) and one trillion equals one million million (10^{12}).

3. Among the main factors driving these changes in land use are the expansion of agricultural production (Salazar et al., 2025), the growth of livestock production, and infrastructure development, among others.

4. This study distinguishes between conservation and restoration, as they involve different types of interventions and financing needs. Conservation is primarily associated with the management of protected areas and the sustainable use of land, while restoration involves active interventions in degraded ecosystems. The definitions of biodiversity, conservation, and restoration used in this document are based on CBD (n.d.-a) and UNEP (2021).



Biodiversity Economics

1



This chapter presents the economic and financial context of biodiversity and its financing, addressing the global dimension of the financing gap, its relevance to Latin America and the Caribbean, and its links to the KM-GBF.

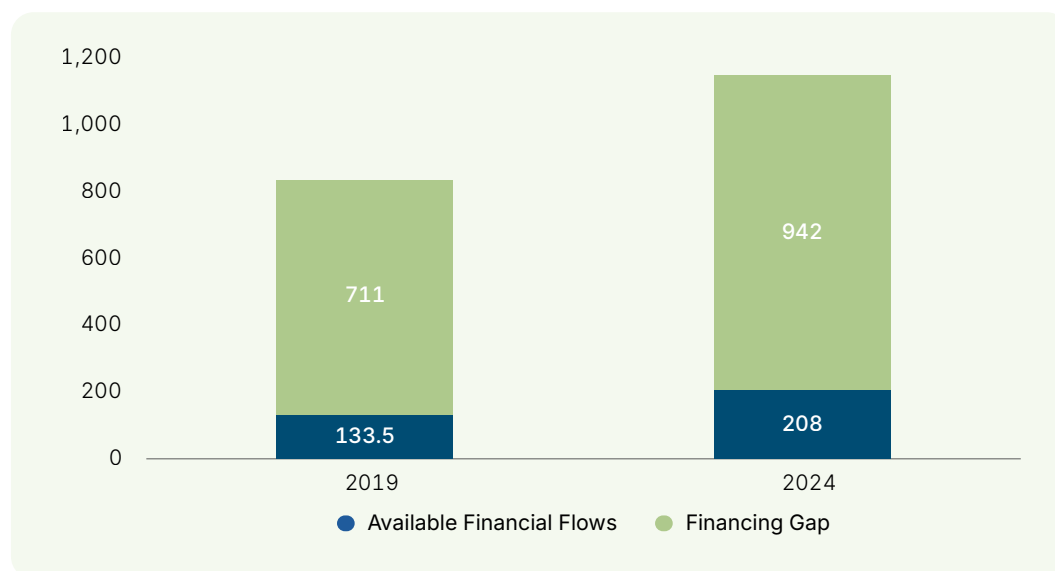
1.1 Estimates of Biodiversity Financing at the Global Level

Available estimates place the annual global biodiversity financing gap between US\$ 598 billion and US\$ 824 billion in 2019, with an average of US\$ 711 billion (Deutz et al., 2020; OECD, 2020; Koplow and Steenblik, 2022). For 2025, estimates by the Paulson Institute (2025) raise this gap to approximately US\$ 942 billion annually. These figures illustrate the difference between financing needs and the resources currently mobilized.

Estimates for 2022 suggest that countries invest approximately US\$ 7 trillion annually in activities that adversely affect global natural capital (7% of global GDP), including fossil fuel subsidies, which nearly doubled compared with 2021, rising from US\$ 560 billion to US\$ 1.16 trillion. This compares with just US\$ 200 billion invested in nature-based solutions (NbS) in the same year (UNEP, 2023). Construction, electricity, real estate, oil and gas, and food production account for approximately 43% of these negative flows, equivalent to 16% of total global investment (UNEP, 2023).

In 2020, global expenditure on biodiversity conservation and sustainable use ranged from US\$ 78 billion to US\$ 91 billion annually. Nearly three-quarters of this amount came from countries' public expenditure, while the remainder came from international public financing, particularly official development assistance (ODA), and private investment.

FIGURE 1
Global Biodiversity Financing Gap (Billions of dollars)



Source: Economic Commission for Latin America and the Caribbean, based on Paulson Institute. (2025). *Financing nature: The unabated biodiversity finance crisis* [Interim report]. https://www.paulsoninstitute.org/wp-content/uploads/2025/09/Financing-Nature_Interim-Update_2025.pdf.

1.2 Importance of Biodiversity and Its Financing for Latin America and the Caribbean

Biodiversity and ecosystem services constitute a strategic economic asset and a core component of Latin America and the Caribbean's productive base. Globally, approximately 52% of GDP is generated in sectors that are moderately or highly dependent on nature (World Economic Forum and PwC, 2020). This dependence is even greater in the region, accounting for 56% of GDP, reflecting the structural weight of primary activities in output, employment, and exports; in 2021, primary products accounted for 56% of the region's export value (ECLAC, 2023, 2024a, 2024d).

This pattern has constrained productive diversification and intensified pressures on ecosystems, with quantifiable effects: if current trends persist, the partial collapse of key ecosystem services could generate losses equivalent to 3.4% of regional GDP (ECLAC, 2024d), while agricultural productivity growth between 1995 and 2021 was associated with a 50% increase in emissions and pollution (Salazar et al., 2025).

This economic importance is not fully reflected in investment decisions, partly because pricing systems and economic accounting do not adequately capture the loss of ecosystem services and natural capital (Dasgupta, 2021). In this context, regional fisheries productivity declined by 33.8% between 1999 and 2019, and untapped potential remains for the development of coastal carbon markets (ECLAC, 2024d, 2025b), despite progress in instruments such as carbon pricing (ECLAC, 2025a).

This undervaluation is reflected in the structure of financial flows: globally, mobilized resources cover only 16% to 19% of the total financing needed to halt biodiversity loss (Deutz et al., 2020) and rely primarily on public financing (82%), while negative economic incentives—most of which stem from public expenditure—are three times greater in magnitude than positive financial flows (Deutz et al., 2020; OECD, 2020; Koplow and Steenblik, 2022).

In Latin America and the Caribbean, although sufficient information is not yet available to accurately estimate total financing needs, existing assessments provide an indication of their magnitude. Achieving the target of conserving at least 30% of the territory through protected areas or other effective area-based conservation measures would require investment equivalent to 0.26% to 0.28% of regional GDP through 2030.⁵ This study estimates total biodiversity financing needs at approximately 2.3% of regional GDP, compared with available financial flows of around 0.2%.

1.3 Objectives

The persistent financing gap for a nature-positive productive transformation is one of the main structural risks to development in Latin America and the Caribbean: resource allocation continues to favor activities that degrade biodiversity, while investment in its conservation, restoration, and sustainable use remains insufficient.

Accurately determining the level of investment in biodiversity is essential to assessing the alignment of public budgets and sectoral plans with biodiversity conservation and sustainable use targets (ECLAC, 2024a). Understanding, reducing, or closing this gap is now a prerequisite for advancing toward a development model that effectively integrates biodiversity into economic and financial decision-making:

- Helps identify sources of financing, inform public policy, and prioritize the efficient allocation of expenditure.

⁵ In addition, avoiding the deforestation projected through 2030 would require approximately 0.06% of regional GDP annually (ECLAC, 2023).

- Serves as a key instrument for strengthening Latin America and the Caribbean's position in mobilizing international resources, in a context in which the region faces a "triple crisis" of climate, debt, and biodiversity that significantly limits its capacity to invest in nature without external support (Expert Review on Debt, Nature and Climate, 2025).⁶
- Helps manage the economic, climate, and financial risks associated with biodiversity loss.
- Provides the data needed for territorial planning, institutional strengthening, and monitoring, transparency, and compliance in relation to the KM-GBF and the 2030 Agenda.

Taken together, these elements aim to inform public policy and investment decisions that align productive development, financing, and biodiversity conservation in Latin America and the Caribbean.

1.4 The Biodiversity Financing Gap: Kunming-Montreal Global Biodiversity Framework

National Biodiversity Strategies and Action Plans (NBSAPs), government plans across the region, and the KM-GBF guide the integration of biodiversity into economic and financial decision-making, taking into account the risks and dependencies associated with natural capital. To this end, they promote instruments such as green and blue bonds, debt-for-nature conversions, blended finance, green loans, and payments for environmental services (PES), as well as NbS and green infrastructure, which aim to mobilize resources, improve capital allocation, and align economic incentives with sustainability objectives.

A central element of these strategies is the explicit recognition of the global biodiversity financing gap, estimated at approximately US\$ 700 billion annually, as well as the need to progressively close it by 2030. To this end, the KM-GBF establishes specific targets aimed both at increasing financial flows toward biodiversity and at redirecting those that currently contribute to its degradation. In particular, Target 18 calls for eliminating or reforming incentives that are harmful to biodiversity, reducing them by at least US\$ 500 billion annually, while Target 19 sets the objective of mobilizing at least US\$ 200 billion annually from all sources. This approach reflects a significant shift in the financing paradigm: closing the gap depends not only on increasing available resources, but also on correcting the economic signals that shape investment and production decisions.

⁶. Closing the financing gap requires clear metrics and transparency to increase the participation of multilateral development banks and investors in conservation, restoration, and sustainable use projects (Lacey et al., 2025).

In line with this approach, decisions adopted under the Convention on Biological Diversity (CBD) have progressively strengthened the resource mobilization architecture, from the initial strategy through its subsequent update and operationalization under the KM-GBF. In this process, national biodiversity finance plans and international cooperation mechanisms play a central role, alongside instruments such as the Global Biodiversity Framework Fund (see Table 1).

TABLE 1

Key Decisions on Resource Mobilization Under the Convention on Biological Diversity (CBD)

DECISION	MAIN CONTENT	RELEVANCE TO BIODIVERSITY FINANCING
CBD/COP/IX/11	Adoption of the first Resource Mobilization Strategy.	Establishes the initial framework for increasing international and domestic financial flows, with the aim of reducing the financing gap and supporting implementation of the three objectives of the CBD.
CBD/COP/DEC/X/2	Reaffirmation of the strategy and incorporation of monitoring indicators.	Strengthens monitoring, transparency, and accountability mechanisms for biodiversity financing.
CBD/COP/15/7	Updated Resource Mobilization Strategy aligned with the Kunming-Montreal Global Biodiversity Framework.	Introduces concrete targets for closing the financing gap by 2030 (see Targets 18 and 19), also aimed at aligning public and private financial flows and improving efficiency and transparency. It also establishes the Global Biodiversity Framework Fund (GBFF), promotes national biodiversity finance plans, and creates the Advisory Committee on Resource Mobilization.
CBD/COP/16/34	Consolidation and operationalization of the resource mobilization agenda.	Strengthens implementation through the mobilization of domestic resources, innovative instruments, and blended finance; stronger partnerships with multilateral development banks and the private sector; and improved access to financing for Indigenous Peoples and local communities.

Source: Economic Commission for Latin America and the Caribbean, based on the Convention on Biological Diversity.

Although Targets 18 and 19 of the KM-GBF form the core of the financing agenda, effective implementation of the framework requires broader alignment with other targets. In particular, Target 2, on ecosystem restoration, and Target 3, on the conservation of 30% of terrestrial and marine areas, directly determine the scale of financing needs. In turn, targets related to spatial planning, reducing pressures on biodiversity, and transforming productive sectors broaden the scope of financing needs to include key activities such as agriculture, fisheries, forestry, and ecosystem management.

In this context, estimating the regional financing gap plays a strategic role in translating the global commitments of the KM-GBF into viable national strategies. Beyond quantifying the resource shortfall, it helps identify investment priorities, opportunities to redirect financial flows,



and financing mechanisms suited to the economic, institutional, and ecological context of Latin America and the Caribbean. In a region where natural capital is a fundamental asset for development, this study provides evidence to strengthen resource mobilization and reallocation, improve coherence between public policies and financial instruments, and support countries in prioritizing investments in line with their commitments toward 2030.



Regional Context: Biodiversity in Latin America and the Caribbean

2



The economic importance of the region's natural capital, highlighted in the previous chapter, helps gauge the scale of the risks associated with its degradation. A regional input-output analysis covering 18 countries and 40 economic sectors shows that, when supply chains are taken into account, virtually all economic activities in the region depend directly or indirectly on ecosystem services (ECLAC, 2026a). This dependence has tangible economic implications: ecosystems such as the Brazilian Amazon generate estimated annual benefits of at least US\$ 317 billion (Strand, 2022), while deficiencies in fisheries management result in losses of approximately US\$ 3.2 billion annually (ECLAC, 2025b).⁷

The region is home to more than 40% of the world's biodiversity, despite accounting for approximately 16% of the planet's land area (Alpizar et al., 2020), and depends on its ecosystems to sustain productive activities, livelihoods, and multiple dimensions of wellbeing. This natural asset base includes ecosystems of global ecological importance, such as the Amazon, the Brazilian Cerrado, the Gran Chaco, the Tropical Andes, Mesoamerica, and the insular Caribbean, which provide essential services such as water supply, soil conservation, food security, pollination, and disaster protection.

The economic importance of this natural asset base is also reflected in the region's productive structure. A significant share of economic activities depends on the use of natural resources, which account for 12% of value added and 50% of regional exports (ECLAC, 2024d). However, despite the strategic importance of these resources to the regional economy, prevailing production and resource-use patterns continue to exert unsustainable pressures on ecosystems, contributing to degradation and overexploitation.

The development model based on the intensive exploitation of natural resources limits governments' room for maneuver in addressing structural challenges such as low growth, inequality, and poverty (Salazar-Xirinachs, 2023).

The effectiveness of conservation investments also depends on how well they are tailored to the ecological diversity of each territory. Under the KM-GBF, conservation effectiveness is measured not only in terms of aggregate percentages of territory protected, but also by the capacity to ensure the equitable protection of ecoregional diversity.⁸

The need to strengthen the regional financial architecture is further underscored by the emergence of macroeconomic risks associated with ecosystem integrity. These risks include potential impacts on economic growth, fiscal stability, the balance of payments, and sovereign solvency, particularly in economies that are highly dependent on natural capital (Agarwala et al.,

⁷ The orders of magnitude of the areas and ecosystems that need to be conserved and restored in Latin America and the Caribbean are presented in detail in Chapter 4 of this document.

⁸ This approach helps identify conservation gaps and differentiated priorities across countries and biomes, while providing critical inputs for estimating the financing gap.

2022). From a macroeconomic perspective, natural capital acts as a form of “implicit collateral” that underpins foreign exchange earnings and GDP growth. Its degradation can weaken governments’ capacity to meet their financial obligations and increase sovereign risk.

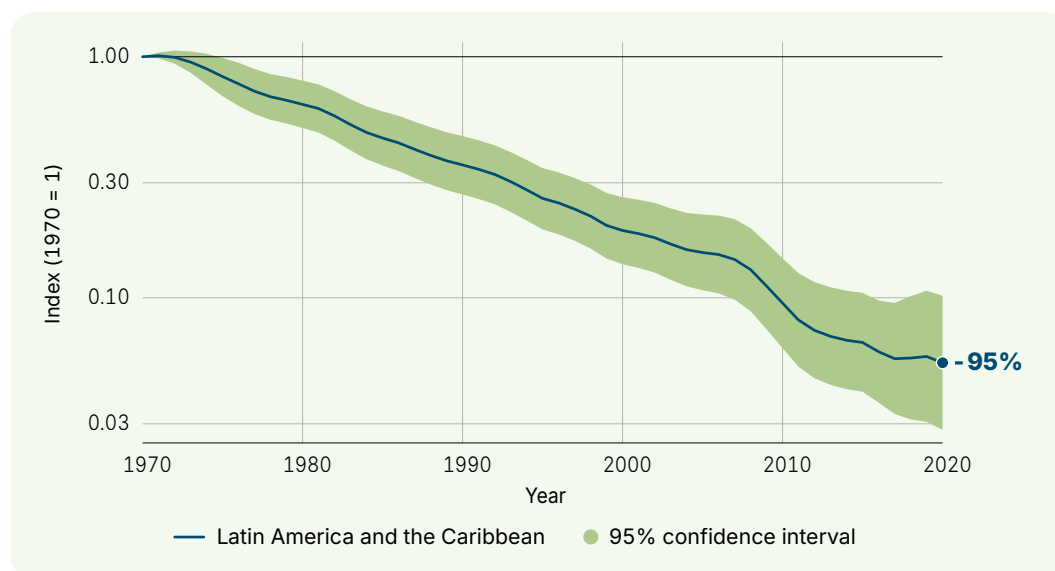
This relationship can also work in the opposite direction: the region’s natural capital abundance can be a relevant factor in negotiations on debt and development financing. Instruments such as debt-for-nature or debt-for-climate conversions link fiscal sustainability to conservation commitments and create opportunities to incorporate nature-related risks and assets into debt sustainability frameworks (Pérez Caldentey, 2025).⁹

According to Agarwala et al. (2022), in the event of a partial collapse of nature, countries such as Brazil and Colombia would face a major supply shock. In Colombia, a projected two-notch downgrade in the country’s credit rating could push it below investment grade, triggering capital flight and currency depreciation. In Mexico, soil degradation would increase the risk of default by 6%, a factor that is becoming increasingly relevant in credit rating assessments and could raise the cost of credit and borrowing, thereby increasing sovereign risk.

The biodiversity loss observed in the region is part of a broader trend of global degradation. Between 1970 and 2020, the average size of monitored wildlife populations declined by 73%, with the steepest declines recorded among freshwater species (85%), followed by terrestrial (69%) and marine species (56%) (WWF, 2024). In this context, Latin America and the Caribbean recorded the largest regional decline in the Living Planet Index, with an estimated reduction of 95% over the same period, exceeding the global average and the declines observed in Africa (76%) and Asia and the Pacific (60%) (WWF, 2024). Although some populations have shown signs of stabilization or recovery as a result of conservation, restoration, reintroduction, and management measures, the region’s aggregate trend remains markedly negative.

⁹ In this context, it has been estimated that a potential tipping point in the Amazon could result in cumulative losses of approximately US\$ 256.6 billion in regional GDP by 2050 (Banerjee et al., 2021).

FIGURE 2
Living Planet Index in Latin America and the Caribbean, 1970–2020
(Index, 1970 = 1; central trend and uncertainty interval)¹⁰



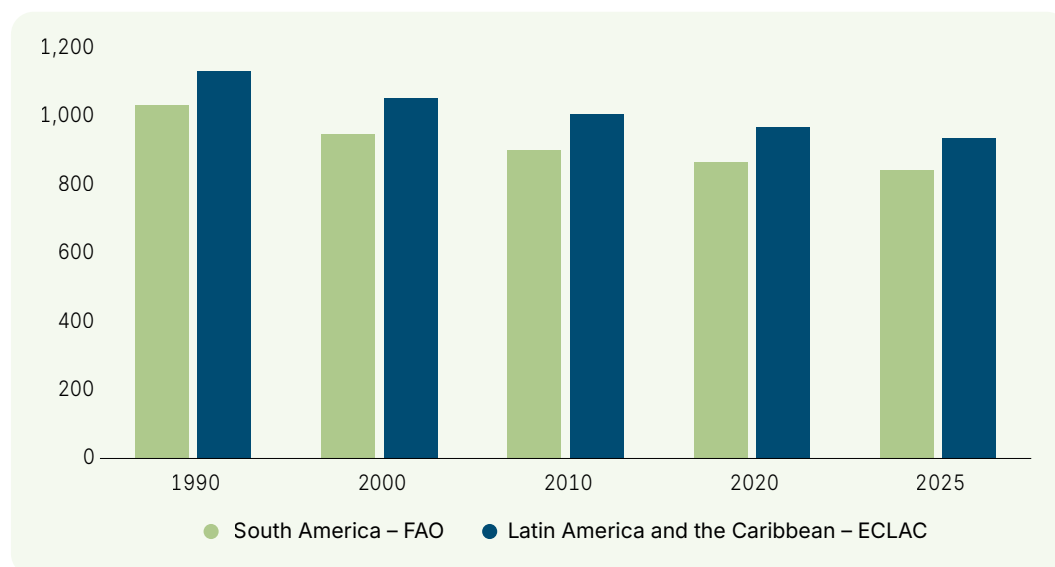
Source: World Wide Fund for Nature. (2024). *Living Planet Report 2024: A system in peril*. <https://wwflpr.awsassets.panda.org/downloads/2024-living-planet-report-a-system-in-peril.pdf>.

2.1 Habitat Loss, Fragmentation, and Degradation Due to Land-Use Change

In Latin America and the Caribbean, the main driver of habitat loss, fragmentation, and degradation is land-use change associated with the expansion of the agricultural frontier: between 1990 and 2023, forest area declined from 1,136.5 million to 956.1 million hectares (ECLAC, 2026b; FAO, 2025c), while the harvested area of oilseeds increased 2.7-fold, that of sugarcane increased by 65.4%, and that of cereals by 26.3% (see Figures 3 and 4). Permanent pastureland recorded a less pronounced decline, from 529.9 million to 484.3 million hectares between 1990 and 2023 (8.6%) (ECLAC, 2026b; FAO, n.d.-a). This transformation also weakens natural assets that underpin productivity, water security, and territorial resilience, with effects that extend beyond the environmental sphere to affect the region's economic and social performance (IDB, 2024a).

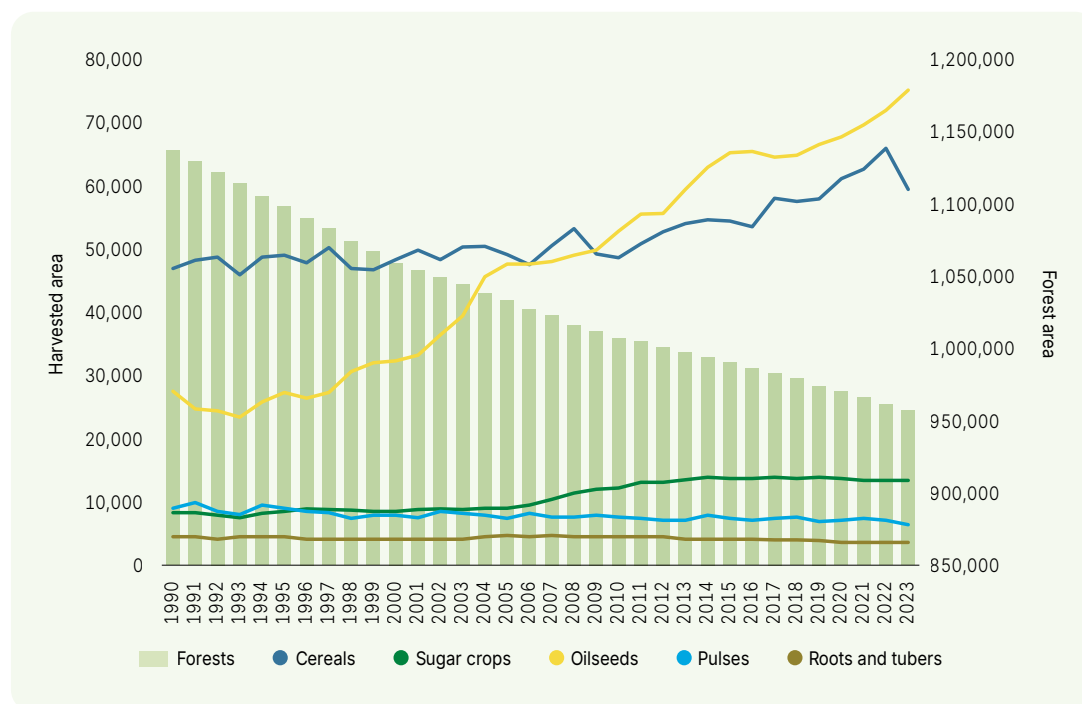
¹⁰. Based on 3,936 populations and 1,362 species.

FIGURE 3
Forest Area in South America and Latin America and the Caribbean, 1990–2025
(Millions of hectares)



Source: Economic Commission for Latin America and the Caribbean, based on *CEPALSTAT: Statistical databases and publications* [Database] (2026b), <https://statistics.cepal.org/portal/cepalstat/>; and Food and Agriculture Organization of the United Nations. (2025c). *Global Forest Resources Assessment 2025*. <https://doi.org/10.4060/cd6709en>.

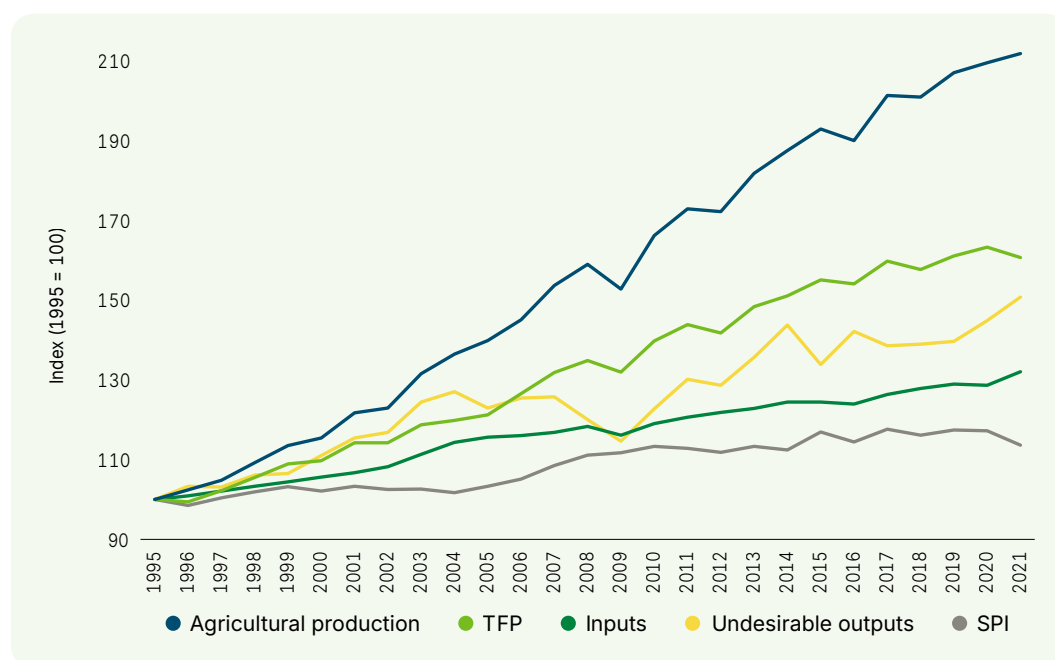
FIGURE 4
Forest Area and Harvested Area of Major Crop Groups in Latin America and the Caribbean, 1990–2023 (Thousands of hectares)



Source: Economic Commission for Latin America and the Caribbean. (2026b). *CEPALSTAT: Statistical databases and publications* [Database]. <https://statistics.cepal.org/portal/cepalstat/>.

Agricultural total factor productivity (TFP) grew steadily between 1961 and 2021, primarily driven by technological change (Salazar et al., 2025). However, when environmental externalities are incorporated through the Sustainable Productivity Index (SPI), the results show that some of these gains were accompanied by increased environmental pressures associated with pollution, water stress, soil erosion, and deforestation (see Figure 5).

FIGURE 5
Agricultural Production, Total Factor Productivity, Sustainable Productivity Index, Desirable and Undesirable Outputs in Agriculture in Latin America and the Caribbean, 1995–2021

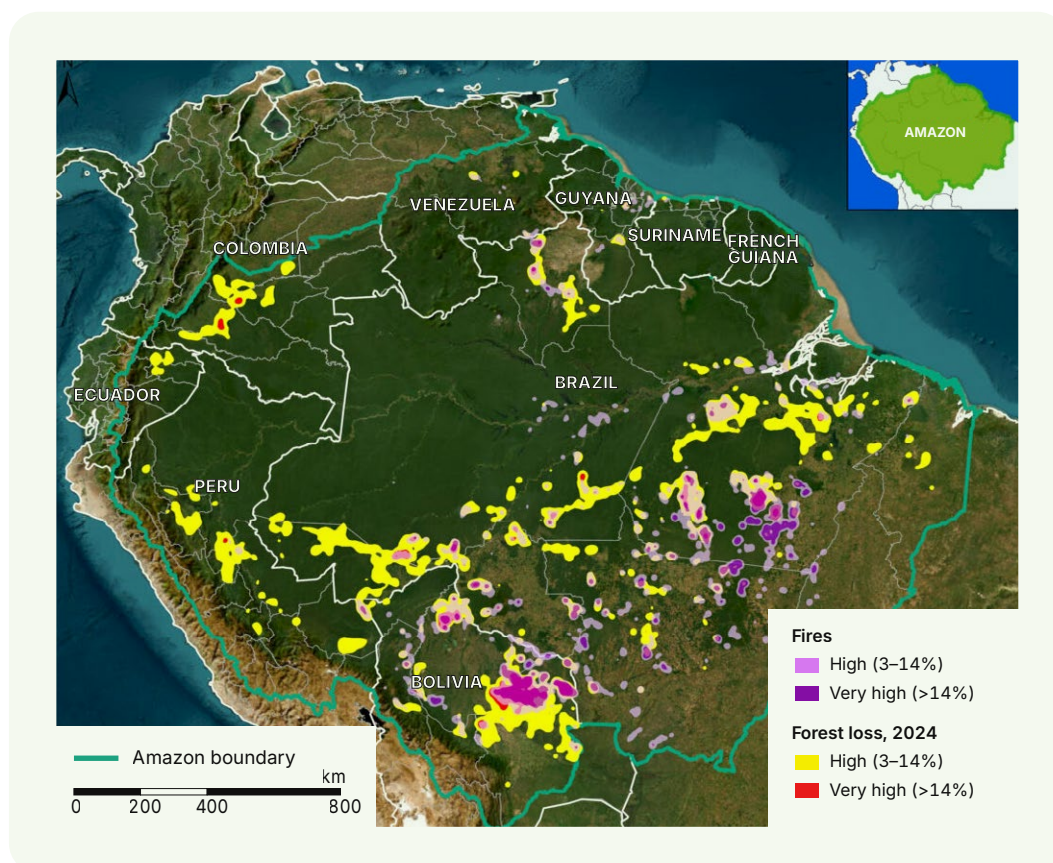


Source: Source: Salazar, L., Schling, M., De Salvo, C. P., and Martel, P. (Eds.). (2025). *Agricultural productivity in Latin America and the Caribbean: What we know and where we are heading*. Inter-American Development Bank. <https://doi.org/10.18235/0013802>.

In 2024, 4.5 million hectares of primary forest in the Amazon were affected: 1.7 million hectares were deforested (34% more than the previous year), and 2.8 million hectares were degraded by fires, concentrated in Brazil, Bolivia, Peru, and Colombia (Finer et al., 2025; see Map 1). Since 2002, the biome has lost 33.7 million hectares of primary forest to direct deforestation, with an additional 10.6 million hectares degraded by fire. This reflects a centripetal pattern in which degradation advances from the edges of the biome toward its interior, weakening climate and water regulation and compromising ecological functions with regional and global implications (Finer et al., 2025; Gaia Amazonas, 2020).

MAP 1

Deforestation and Fire Hotspots in the Amazon, 2024



Source: Finer, M., Ariñez, A., Mamani, N., Cohen, M., and Santana, A. (2025, June 22). *Amazon deforestation & fire hotspots 2024* (MAAP No. 229). Amazon Conservation. <https://www.maaprogram.org/amazon-deforestation-fire-hotspots-2024/>.

In marine and coastal ecosystems, coastal development, pollution, and the conversion of mangroves and wetlands for agricultural, aquaculture, or urban uses lead to habitat loss and degradation.¹¹

¹¹ The region has 43,475 km² of mangroves, 70.3% of which are under some form of protection. Five countries account for 91% of the region's salt marshes, and 59% of salt marsh area is under protection (ECLAC, 2025b).

2.2 Species Overexploitation

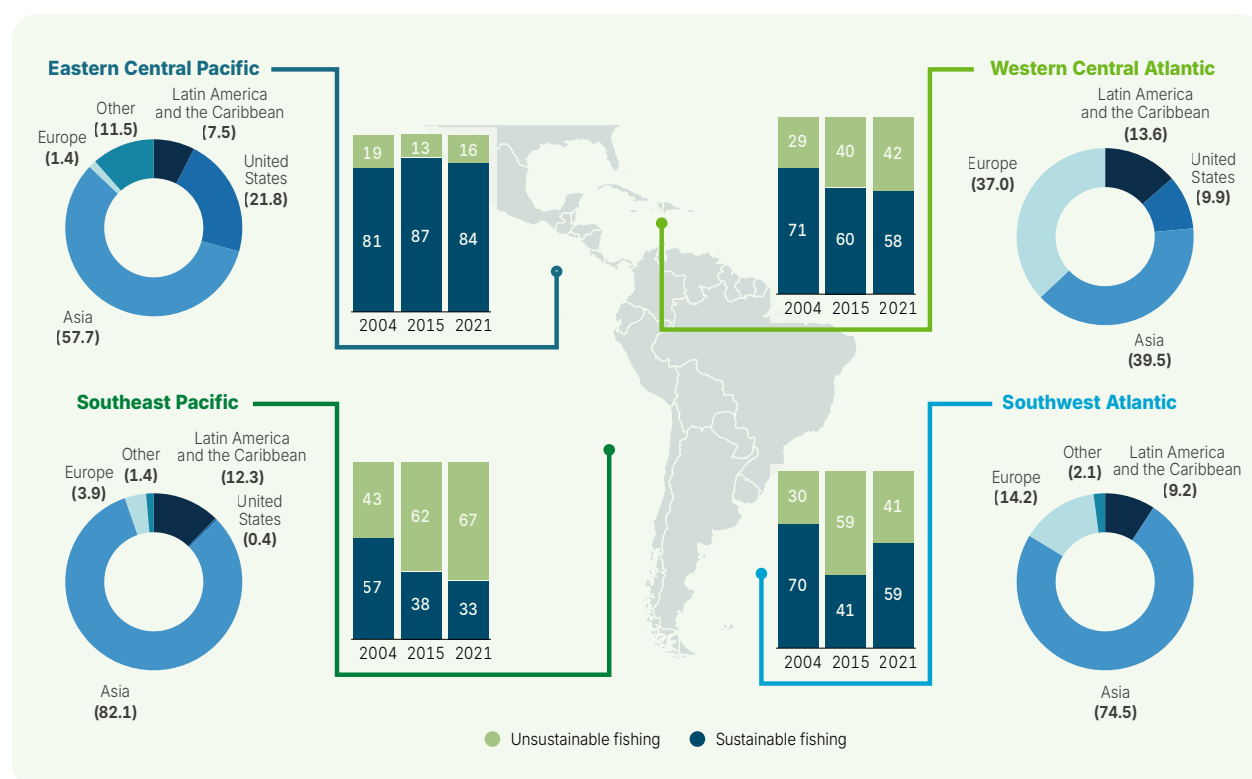
The overexploitation of species and biological resources is one of the main direct drivers of biodiversity loss in Latin America and the Caribbean and, in marine ecosystems, has been the factor with the greatest relative impact since 1970 (IPBES, 2019). In three of the main FAO fishing areas associated with the region,¹² the proportion of fish stocks exploited within biologically sustainable levels was below the global average (64.6%).¹³ Fisheries management aligned with maximum sustainable yield levels could generate approximately 124,000 new jobs and increase catches by 4.1 million tons (ECLAC, 2025b; see Infographic 1). Pressure is compounded by the presence of distant-water fleets—particularly in the Southeast Pacific—harmful subsidies (US\$ 1.345 billion in 2018), and illegal, unreported, and unregulated fishing, as well as high levels of bycatch in fisheries such as shrimp trawling (54% non-target species) (ECLAC, 2025b; OECD and IDB, 2024).

¹² This comparison should be interpreted with caution, as FAO areas are broad statistical units and are not necessarily comparable in terms of fishery composition or economic importance. Nevertheless, it helps identify regional hotspots of pressure on resource sustainability.

¹³ The proportion of stocks within sustainable levels declined in the Southeast Pacific from 63.6% to 33.3% between 2011 and 2021, and in the Western Central Atlantic from 70.8% to 58% between 2004 and 2021. In the Southwest Atlantic, it recovered to 58.8% in 2021, although nearly 40% of its fisheries are still not managed sustainably (ECLAC, 2025b).

INFOGRAPHIC 1

Latin America and the Caribbean: Trends in the Sustainability of the Four Fishing Areas (2004, 2015, and 2021) and Origin of the Distant-Water Fishing Fleets Operating Adjacent to Countries' Exclusive Economic Zones (2018)



Source: Economic Commission for Latin America and the Caribbean, based on Food and Agriculture Organization of the United Nations. (n.d.-a). *FAOSTAT statistical database* [Database]. Retrieved November 20, 2025, from <https://www.fao.org/faostat/en/#data>; and, for the donut charts on the origin of the distant-water fishing fleet (2018), Millage, K. D., Warham, M., Rubino, L. L., and Costello, C. (2021). *Distant Water Fishing Subsidy Atlas*. <http://www.dwfsubsidyatlas.org/>.

Pressure on marine biodiversity is also reflected in the deterioration of coral reefs, which, although covering less than 1% of the seafloor, are home to more than 25% of known marine species (UNEP, n.d.). The region has 14,094 km² of coral reefs, and the proportion of sites classified as being in critical condition increased from 6% in 2008 to 23% in 2024. In the insular Caribbean, which is home to approximately 10% of the world's coral reefs, 45% of the world's fish species, and 25% of the world's coral species, overfishing and the degradation of coastal habitats affect biodiversity and economic activities such as fisheries and tourism (ECLAC, 2025b; IDB, 2024b).

Overexploitation is not limited to fisheries resources: poaching and the illegal capture and trafficking of wild fauna and flora affect nearly 700 species and have repercussions for communities' livelihoods, security, and resilience (Fischer, 2026). These activities are also linked to other illegal economies, including illegal logging and mining, drug trafficking, and land grabbing, which amplify their effects on environmental and territorial governance (United Nations Office on Drugs and Crime, 2024, 2025; Fischer, 2026).

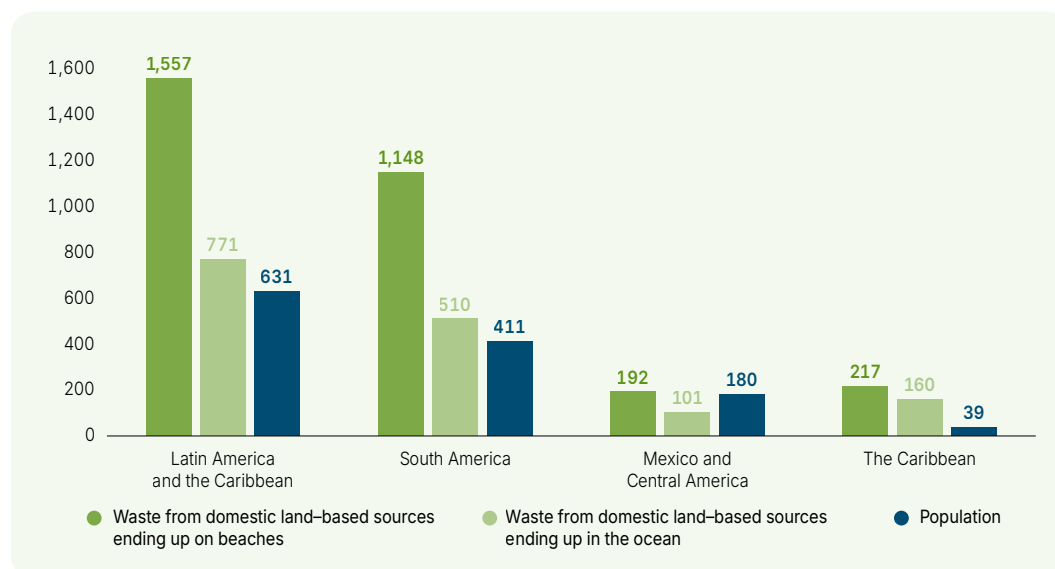
2.3 Pollution

In Latin America and the Caribbean, pollution exerts direct pressure on strategic species and ecosystems, primarily associated with wastewater and urban runoff, agrochemicals, mining, hydrocarbons, and the accumulation of solid waste and plastics (IPBES, 2018, 2019). Urbanization widens gaps in waste management and wastewater treatment, exacerbating soil and water pollution (Bretas et al., 2020; Alarcón Montero et al., 2023). Between 2000 and 2021, fertilizer use in the region increased from 18.3 kg/ha to 47.5 kg/ha, while pesticide use rose from 83.4 kg/ha to 220.8 kg/ha, increasing the risk of diffuse pollution of soils and water bodies (ECLAC, 2025b).

In the marine environment, approximately 80% of pollution originates from land-based sources and is primarily associated with solid waste and plastics, excess nutrients, hydrocarbons, and activities such as aquaculture, fisheries, and maritime transport (ECLAC, 2025b). In 2022, the region recorded 1.6 million tons of accumulated waste on beaches and 771,000 tons in its seas, with particularly high concentrations in the Caribbean (ECLAC, 2025b).

Nitrogen and phosphorus inputs, mainly from inadequately treated wastewater and agricultural runoff, have contributed to eutrophication in parts of the Gulf of Mexico, northern Brazil, and the Caribbean. In the Caribbean, the proliferation of sargassum observed since 2011 has affected beaches, reefs, tourism activities, and coastal biodiversity. The associated costs of inefficient nitrogen management and sargassum cleanup exceed US\$ 20 billion and US\$ 120 million annually, respectively (ECLAC, 2025b).

FIGURE 6
Land-Based Waste Ending Up on Beaches and in the Ocean and Population Size, by Subregion^a, 2022^b (Thousands of tons and millions of people)



Source: Economic Commission for Latin America and the Caribbean. (n.d.-c). *Regional data bank for statistical follow-up to the SDGs in Latin America and the Caribbean: Indicator 14.1.1.. (a) Index of coastal eutrophication; and (b) plastic debris density* [Database]. Agenda 2030 para América Latina y el Caribe. <https://agenda2030lac.org/estadisticas/banco-datos-regional-seguimiento-ods.html>.

^a Includes all countries in the region except the Plurinational State of Bolivia and Paraguay.

^b Data for Mexico are from 2021.

Pollution associated with mining and hydrocarbons poses additional significant risks. In the Amazon, artisanal and small-scale mining is a major source of mercury pollution, affecting water, soils, aquatic biodiversity, and communities that depend on these ecosystems (Esdaile and Chalker, 2018; Gerson et al., 2022; Wasserman et al., 2025).¹⁴

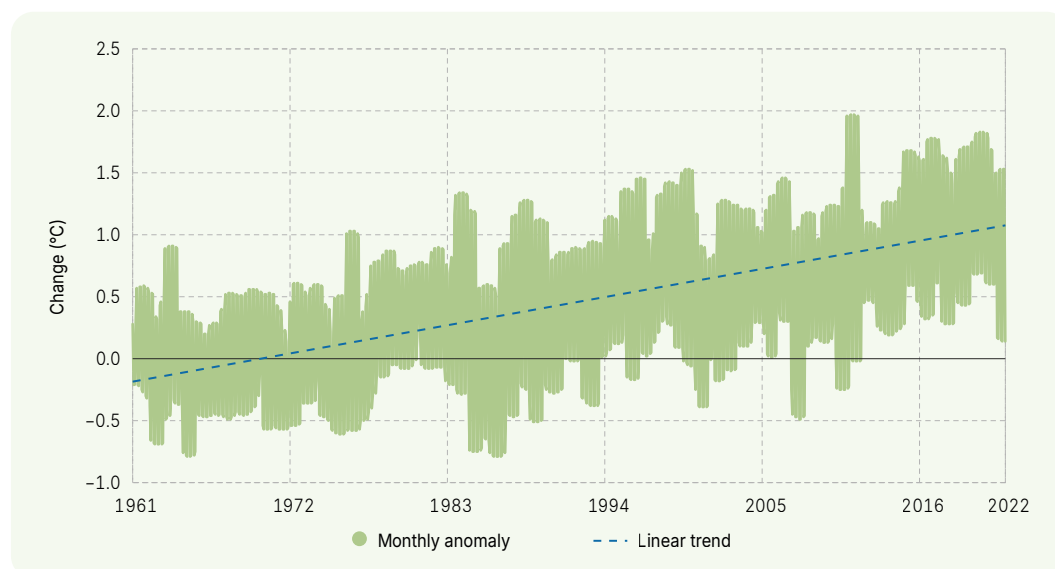
¹⁴. Cases such as the dispersion of mine tailings in the Doce River basin (Brazil) and the spill of 6,000 barrels of crude oil at La Pampilla (Peru, 2022) illustrate these effects on coastal and river ecosystems (Sánchez et al., 2022; Sartori et al., 2023; United Nations Office for the Coordination of Humanitarian Affairs, 2022).

2.4 Extreme Climate Events

The increasing frequency and intensity of extreme climate events in Latin America and the Caribbean affect habitats, reproductive cycles, and food webs, interacting with other pressures such as habitat loss, pollution, and overexploitation (IPCC, 2022). Since 1990, floods and storms have accounted for approximately 80% of recorded climate-related disasters in the region, with 1,384 events, nearly 80,000 lives lost, and more than 116 million people affected; since 2000, wildfires have affected 10.6 million people, damaged 33 million hectares, and generated estimated costs of US\$ 1.3 billion (ECLAC, 2024a). In the Amazon basin, more frequent and intense droughts reduce forest productivity, increase tree mortality and the incidence of fires, and affect carbon sequestration capacity and the habitat of endemic species (IPCC, 2022). In the Tropical Andes, rising temperatures accelerate glacier retreat and alter moisture levels in cloud forests and páramo ecosystems, while in the southern part of the continent, extreme events are degrading temperate forests and steppes and may facilitate the spread of invasive species following fires (IPCC, 2022).

In the marine environment, more than 90% of the world's oceans experienced marine heatwaves in 2023, contributing to the fourth global mass coral bleaching event (ECLAC, 2025b). Sea surface temperatures in the region increased steadily between 1961 and 2022 and, under the SSP1 and SSP5 scenarios, increases of more than 2°C are projected by 2040 in the South Atlantic and the Equatorial Pacific, and even greater increases in the Caribbean (see Figure 7), affecting coral cover and reef fish populations. This is compounded by ocean acidification, the intensity of which increased by 12% between 1985 and 2021, limiting calcification in corals, bivalves, and echinoderms (ECLAC, 2025b).

FIGURE 7
Latin America and the Caribbean: Changes in Temperatures Across Countries, 1961–2022 (Degrees Celsius)



Source: Economic Commission for Latin America and the Caribbean, based on Food and Agriculture Organization of the United Nations. (n.d.-a). *FAOSTAT statistical database* [Database]. Retrieved November 20, 2025, from <https://www.fao.org/faostat/en/#data>; and CEPALSTAT: *Statistical databases and publications* [Database] (2026b), <https://statistics.cepal.org/portal/cepalstat/>.

Increasing coastal exposure to hurricanes and storm surges underscores the importance of ecosystems as natural protective infrastructure. In Cuba, mangroves have reduced the area affected by flooding following extreme events by 222 km² and provide annual protection to more than 22,000 people, while coral reefs prevent losses exceeding US\$ 400 million through their wave-buffering function (ECLAC, 2025b). Fisheries and mariculture are highly vulnerable to these events, with projected declines in catch volumes by 2050 under high-emissions scenarios. At the same time, reef restoration in Mesoamerica could generate estimated benefits of US\$ 35 billion by 2030 (ECLAC, 2025b). In a region that accounts for a limited share of global emissions but faces disproportionately severe impacts, this situation increases the vulnerability of ecosystems and the economic activities that depend on them.

2.5 Invasive Alien Species

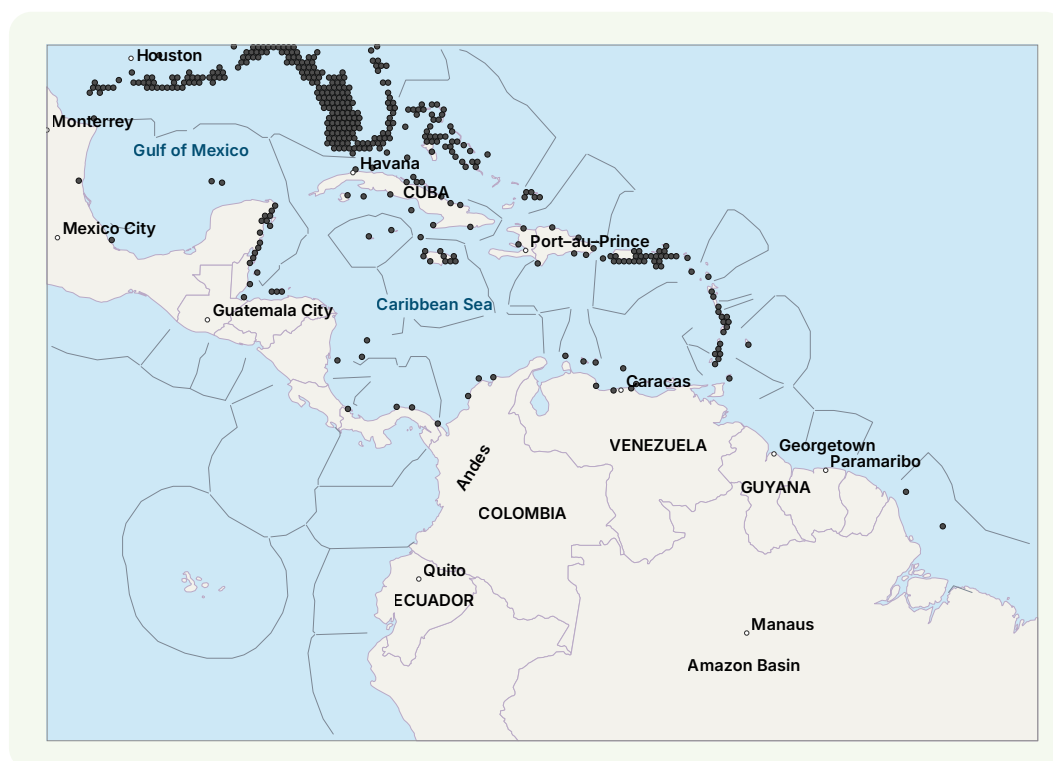
The impact of invasive alien species (IAS) is significant in Latin America and the Caribbean, given the region's biological richness, growing connectivity through trade, tourism, and shipping, and the particular sensitivity of its island, freshwater, coastal, and terrestrial ecosystems (IPBES, 2018). The region is home to 10 of the planet's 36 biodiversity and endemism hotspots, increasing the exposure of its ecosystems to these pressures (Conservation International, n.d.). IAS alter food webs, displace native species, and reduce ecosystem services, interacting with pressures such as deforestation, landscape fragmentation, pollution, and climate change. The loss of approximately 150 million hectares of natural forest over the past three decades has expanded the conditions conducive to their colonization and spread (ECLAC, 2024a). Globally, IPBES (2023) estimates that the annual cost of IAS exceeded US\$ 423 billion in 2019, affecting production, infrastructure, human health, and sectors such as agriculture, forestry, and fisheries, particularly small and medium-sized producers.¹⁵

In marine ecosystems, the introduction of IAS is associated with maritime transport, the trade in ornamental species, aquaculture, and tourism (ECLAC, 2025b). The lionfish, native to the Indo-Pacific, has spread across the western Atlantic and the Caribbean and, in The Bahamas, has been associated with reductions of up to 79% in the recruitment of native fish in invaded reefs (Albins and Hixon, 2008; see Map 2). In terrestrial and freshwater ecosystems, the uncontrolled spread of hippopotamuses in the Magdalena River basin in Colombia is altering wetlands and riverbanks and posing risks to human communities (Subaluský et al., 2021, 2023).

¹⁵ More than 2,300 IAS are also found on lands managed by Indigenous Peoples and local communities, affecting their livelihoods and territorial autonomy.

MAP 2

Atlantic Coast of the Americas: Lionfish Occurrence Records, 2024



Source: Economic Commission for Latin America and the Caribbean, based on U.S. Geological Survey. (n.d.). *Nonindigenous Aquatic Species Database* [Database]. <https://nas.er.usgs.gov/>.

These cases show that IAS affect ecosystem composition and essential ecosystem services, such as water availability, fisheries productivity, and food provision, while generating restoration and management costs for rural and coastal communities.

2.6 Ecological Representation and Conservation Gaps by Ecoregion in Latin America and the Caribbean

Ecological representation provides a complementary dimension for identifying conservation gaps that are not captured by aggregate area-based targets. Although the region's average share of protected areas is above the global average, 61% of countries with a coastline have less than 5% of their territory under some form of protection.



Conceptual and Methodological Framework

3



Building on the background and regional context presented above, this section sets out the general methodological approach that will guide the estimation of the biodiversity financing gap in Latin America and the Caribbean. The analysis is structured around two complementary and sequential components designed to ensure consistency between the quantification of financing needs and the identification of available financial flows.

The methodological approach draws on the most widely recognized international framework for estimating biodiversity financing needs (Deutz et al., 2020), which has become a common reference for comparative exercises at the global level. However, this study incorporates specific methodological innovations that reflect the information available in Latin America and the Caribbean, as well as the region's institutional, economic, and ecological characteristics. These innovations will make it possible to adapt global assumptions to national realities, improve the accuracy of the estimates, and strengthen the replicability of the analysis across diverse territorial contexts.

The proposed approach is based on two complementary components. The first involves estimating biodiversity financing needs, while the second involves identifying and quantifying current financial flows directed toward biodiversity conservation and sustainable use. Together, these components provide the essential inputs for subsequently calculating the regional financing gap.

The first component focuses on estimating financing needs, understood as the resources required to halt and reverse biodiversity loss in the region. These needs are derived primarily from national biodiversity commitments, in line with the targets of the Kunming-Montreal Global Biodiversity Framework (KM-GBF), as well as from the sectoral and territorial transformations needed to advance toward more sustainable production systems. In this context, KM-GBF Target 10 provides a relevant reference for the sustainable management of landscapes and seascapes and informs the estimation of the costs associated with the transition from conventional production practices to more sustainable approaches that promote biodiversity conservation and sustainable use.

Likewise, the first component incorporates KM-GBF Target 3, which calls for conserving at least 30% of terrestrial and marine areas of importance for biodiversity. For this target in particular, methodological inputs will be used to estimate two categories of direct costs: (i) the costs of establishing new terrestrial and marine protected and conservation areas in Latin America and the Caribbean; and (ii) the costs of managing and administering these areas. In addition, the estimation of financing needs considers the costs of priority actions and interventions and their projection over different time horizons—short, medium, and long term—under alternative scenarios defined according to the scope of interventions, technologies employed, and levels of ambition.

These scenarios will make it possible to establish minimum and maximum ranges of required investment while considering differentiated approaches: one focused on biodiversity conservation, another aimed at strengthening productive activities, and a third, balanced approach that combines both priorities. This is complemented by consideration of the financing needs associated with biodiversity conservation in urban and peri-urban areas, with a focus on protecting the natural resources and ecosystem services that sustain the region's cities.

The second component focuses on identifying and quantifying current financial flows directed toward biodiversity in the region. This analysis seeks to establish a regional baseline of spending and investment in nature by integrating information on national budgets, official development assistance (ODA), multilateral funds, green finance, compensation mechanisms, carbon markets, and philanthropy, among other sources. The collection and systematization of this information will apply criteria of comparability and methodological consistency to ensure that results are homogeneous at the regional level. Values will be expressed in constant terms and classified by source, destination, magnitude, and geographic scope, making it possible to distinguish flows directly associated with biodiversity conservation, restoration, or sustainable use.

Both components form the methodological basis of this study. Together, they will make it possible to estimate the regional financing gap, defined as the difference between the resources needed to achieve biodiversity targets and the financial flows currently available. Building on this analysis, the study will then define scenarios for meeting biodiversity commitments, with a 2030 horizon for national targets directly linked to the achievement of specific KM-GBF targets, and a 2050 horizon for those with a less direct link to the Framework or whose effective implementation requires longer-term horizons. Based on these findings, a regional roadmap will be developed for mobilizing resources, strengthening policy coherence, and improving the enabling conditions for financing biodiversity conservation, restoration, and sustainable use in Latin America and the Caribbean.¹⁶

¹⁶ It should be noted that this exercise does not seek to estimate the full range of environmental or sectoral needs in the region, but rather those that can be directly and comparably linked to biodiversity conservation, restoration, and sustainable use. In this context, categories associated with water-related and ecosystem functions, such as the restoration of forests, páramos, and peatlands, and watershed conservation, are explicitly included. However, specific requirements related to water scarcity or overuse, sanitation infrastructure, the transformation of energy mixes, the remediation of environmental liabilities from mining or industrial activities, and other broad sectoral costs that fall outside the scope of a biodiversity-focused financing assessment are not quantified.

3.1 Conceptual Approach

Within this framework, financing needs for biodiversity conservation, restoration, and sustainable use refer to the resources required to conserve, protect, restore, manage, and sustainably use biodiversity and the biophysical systems that support it. Their quantification is based on the costs required to achieve national and international conservation and sustainable-use targets established in instruments such as the KM-GBF and National Biodiversity Strategies and Action Plans.

Likewise, the methodology proposed in this study can serve as a key input for territorial ecological planning processes in the region by providing estimates disaggregated by ecosystem and sector. In countries such as Chile, where the law establishing the Biodiversity and Protected Areas Service (SBAP) and the Framework Law on Climate Change set specific mandates in this area, the study's findings can help operationalize ecosystem-based land-use planning instruments.

In this context, the study identified a set of categories for calculating the financing gap, defined on the basis of variables for which information is available and comparable at the regional level, following and adapting the approach proposed by Deutz et al. (2020). Building on this starting point, the study analyzed how these variables could contribute to estimating the financing gap in relation to specific KM-GBF targets. To this end, the KM-GBF Monitoring Framework was used as a reference, and the headline indicators (CBD/COP/16/WG.I/CRP.11)—that is, those defined to monitor progress toward achieving the targets—were reviewed and mapped to intervention categories that could be economically quantified. As a result, the categories defined make it possible to approximate the financing gap associated with Targets 2, 3, 5, 6, 7, 10, 18, and 19. The remaining targets are not included in the analysis because of the lack of information on associated variables that would allow for a robust estimate.¹⁷

Table 2 summarizes the correspondence between the targets, the KM-GBF headline indicators, and the intervention categories considered in estimating the financing gap. This makes it possible to directly link financing needs to existing financial flows and, on this basis, identify financing gaps in specific areas of action.

¹⁷ The inclusion of KM-GBF targets reflects the availability of comparable regional data and replicable methodologies for estimating the required costs. Target 12, which addresses urban green and blue spaces, is excluded due to the lack of regional sources for systematically estimating its costs, despite its relevance to biodiversity conservation and sustainable use.

TABLE 2

Correspondence Between KM-GBF Targets, Headline Indicators, and Intervention Categories for Estimating the Financing Gap

KM-GBF TARGET (2030)	HEADLINE INDICATOR (KM-GBF)	CATEGORIES FOR CALCULATING THE FINANCING GAP
Target 2: Restore at least 30% of degraded terrestrial, inland water, and marine ecosystems.	Area under restoration.	- Restoration of priority ecosystems: forests, mangroves, seagrass meadows, salt marshes, reefs, páramos, and peatlands. - Watershed conservation near cities.
Target 3: Conserve at least 30% of terrestrial, inland water, coastal, and marine areas through effectively managed protected areas and other effective area-based conservation measures (OECMs).	Coverage of protected areas and OECMs.	Terrestrial and marine protected areas: Regional costs of protecting 30% of each country's marine territory and 30% of its terrestrial territory.
Target 5: Ensure that the use, harvesting, and trade of wild species are sustainable, safe, and legal.	Proportion of fish stocks within biologically sustainable levels.	Production landscapes based on wild resources: Wild-capture fisheries.
Target 6: Eliminate, minimize, and manage invasive alien species and their pathways of introduction.	Rate of invasive alien species establishment.	Pressures on biodiversity in landscapes and seascapes: Invasive species management.
Target 7: Reduce pollution, taking into account its cumulative effects, including halving excess nutrients and the overall risk posed by pesticides and highly hazardous chemicals.	- Index of coastal eutrophication potential. - Pesticide environment concentration.	Pressures on biodiversity in landscapes and seascapes: - Water treatment in rural areas. Urban and peri-urban areas: - Urban water treatment.
Target 10: Ensure the sustainable management of areas under agriculture, aquaculture, fisheries, and forestry through biodiversity-friendly practices.	- Proportion of agricultural area under productive and sustainable agriculture. - Progress toward sustainable forest management.	Managed production landscapes: - Agriculture and crops. - Permanent meadows and pastures. - Forest production.
Target 18: Identify, eliminate, phase out, or reform incentives harmful to biodiversity and increase positive incentives.	- Positive incentives in place to promote biodiversity conservation and sustainable use. - Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out, or reformed.	

KM-GBF TARGET (2030)	HEADLINE INDICATOR (KM-GBF)	CATEGORIES FOR CALCULATING THE FINANCING GAP
Target 19: Increase financial resources from all sources by at least US\$ 200 billion per year and improve efficiency and implementation.	• International public funding, including official development assistance (ODA), for conservation and sustainable use of biodiversity and ecosystems. • Domestic public funding on conservation and sustainable use of biodiversity and ecosystems. • Private funding (domestic and international) on conservation and sustainable use of biodiversity and ecosystems.	

Source: Economic Commission for Latin America and the Caribbean, based on the Convention on Biological Diversity.

Based on this structure, the study proposes an approach to estimating financing gaps associated with Targets 2, 3, 5, 6, 7, and 10, as well as enabling dimensions linked to Targets 18 and 19. Overall, this makes it possible to capture four broad areas of intervention: (i) actions for the conservation, restoration, and sustainable use of ecosystems, linked to Targets 2 and 3; (ii) reduction of pressures on biodiversity in landscapes and seascapes, linked to Targets 5, 6, and 7; (iii) transformation of production landscapes through more sustainable practices, linked to Target 10; and (iv) enabling conditions related to economic incentives and the mobilization of financial resources from public and private sources, linked to Targets 18 and 19.

Within this framework, Targets 2 and 3 provide a basis for estimating needs associated with the restoration, conservation, and effective management of ecosystems and protected areas, including their various cost components. Targets 5, 6, and 7 address key pressures on biodiversity, such as the overexploitation of wild resources, invasive alien species, and pollution. Target 10, in turn, makes it possible to estimate the costs associated with the transition toward more sustainable production systems in agriculture, agricultural grasslands and pastures, and forestry, while Targets 18 and 19 provide the framework for examining the economic incentives and financial flows relevant to closing the gap.

Taken together, this methodological approach does not seek to comprehensively operationalize the KM-GBF, but rather to provide an analytical and financially operational interpretation of its targets, using available information and established methodologies. In this way, Table 2 serves as a bridge between the global framework and the empirical analysis, making it possible to systematically identify the financing needs, existing financial flows, and gaps that constrain the achievement of biodiversity targets in Latin America and the Caribbean.

3.2 Methodological Considerations, Assumptions, and Limitations

This study is one of the first comprehensive efforts to estimate the biodiversity financing gap in Latin America and the Caribbean from a regional perspective, bringing together sectoral information, global targets, and territorial specificities. In this regard, beyond its quantitative dimension, the analysis provides a solid basis for guiding decision-making, strengthening public planning, and promoting a gradual reconfiguration of financial flows toward more sustainable development models.

The results should be interpreted as an approximation of the order of magnitude of the resources required, rather than as an exact estimate. This reflects both the inherent complexity of ecological systems and the limitations of the available information.¹⁸

In addition, the estimated values should not be viewed as fixed or immutable figures. The costs associated with biodiversity conservation, restoration, and sustainable use are inherently dynamic and depend on multiple factors, including the availability of information, changes in prices, technological development, market conditions, regulatory frameworks, and global and regional governance dynamics. Accordingly, the magnitude of the gap may change over time, both as new sectors and variables are incorporated and as the available information is expanded and refined, including socioeconomic variables.

From a methodological perspective, the analysis focuses on the initial investments required for the transition (capital expenditures), excluding operating and maintenance costs in most cases—with the exception of protected areas, invasive species, and wild-capture fisheries—and therefore the results represent a minimum investment level. The study also relies on simplifying assumptions, such as the linear implementation of interventions and the use of uniform time horizons, which do not fully reflect the complexity of actual processes across the region.

The exercise also has coverage limitations: it includes only dimensions directly related to biodiversity, the agrosilvopastoral and fisheries sectors, and water treatment, while excluding sectors such as energy transformation, infrastructure, and the remediation of environmental liabilities from mining and industrial activities. These limitations are compounded by regional information gaps, which have required the use of proxy variables, extrapolations, and cost ranges, as well as challenges in identifying and classifying current financing flows, since many instruments do not explicitly distinguish their contribution to biodiversity.

¹⁸ In particular, biodiversity lacks a single, universally accepted metric equivalent to those available in other areas, such as carbon quantification. This necessitates the use of indirect approaches, combinations of data sources and scales, and estimates based on average costs.

The methodological limitations described above also extend to the formulation of the resource mobilization strategy and the scenarios for closing the financing gap. In particular, estimates of mobilization potential depend on assumptions about macroeconomic, fiscal, and financial variables that are subject to a high degree of uncertainty.

First, the scenarios developed assume conditions of macroeconomic stability, fiscal capacity, and institutional coordination that may not materialize uniformly across countries. Second, estimates of private-sector mobilization rely on financial markets that are still developing, with measurement barriers, regulatory uncertainty, and limitations in structuring bankable projects. Likewise, redirecting harmful subsidies faces political and social challenges that require gradual processes and compensation mechanisms that are not fully incorporated into the estimates. The scenarios also assume relatively linear relationships between instruments, flows, and outcomes, without fully capturing interactions or institutional capacity constraints, and do not explicitly incorporate risks associated with external shocks, such as economic crises or extreme climate events. Taken together, these limitations suggest that the scenarios should be viewed as forward-looking exercises that illustrate orders of magnitude and possible trajectories, rather than as deterministic projections.

In this context, this study can be viewed as a first step in a cumulative process of knowledge generation, based on the robust information available and, to the extent possible, on adapting a recognized global methodology to regional characteristics. Its value lies in establishing an initial analytical framework that can support progress toward increasingly accurate, comprehensive estimates tailored to the realities of the countries of Latin America and the Caribbean.

Estimation of Biodiversity Financing Needs

4



This chapter presents an integrated analysis of the methodology and results for the various variables used to estimate regional biodiversity financing needs.

4.1 Cross-Cutting Methodological Aspects of the Chapter

The methodological elements addressed in this brief section are essential for defining the scope of the financing needs estimates. Together with the limitations and assumptions underlying the methodology used, they form the basis for the calculations and analysis presented in Table 3.

TABLE 3
Key Methodological Aspects of the Estimation of Biodiversity Financing Needs

METHODOLOGICAL ASPECT	ASSUMPTION ADOPTED
Treatment of Prices and Temporal Updating of Costs	All costs and monetary amounts are expressed in constant 2025 U.S. dollars, adjusted using deflators and exchange rates to ensure comparability across sources. The estimate focuses primarily on the initial investments required for biodiversity conservation, restoration, and productive transformation (CAPEX) and excludes operating and maintenance costs (OPEX), except in the case of protected areas.
Time Frame for Financing Needs	Two time horizons are used. Categories associated with quantifiable KM-GBF targets, such as protected areas and ecosystem restoration, are estimated through 2030. Structural productive transformations are estimated through 2050, taking into account the time required for their adoption and consolidation.
Areas or Quantities to Be Addressed	The areas or quantities subject to intervention are assumed to remain constant throughout the analysis period, using 2025 or the latest year for which information is available as the reference year. The only exception is invasive alien species, for which a growth rate derived from the specialized literature is incorporated.
Temporal Distribution of Interventions	Interventions are assumed to be implemented linearly over the corresponding time horizon, with the areas or quantities to be addressed distributed proportionally across each year.
Water Dimension	Water is considered a cross-cutting dimension of the analysis because of its close relationship with ecosystem functioning and biodiversity. However, the study addresses only its role as a factor associated with biodiversity conservation and does not include aspects related to water management or public health.

Source: Economic Commission for Latin America and the Caribbean.

The estimation of financing needs for the productive transition categories (agriculture, grasslands, and forest production) and ecosystem restoration follows a common structure: (i) the analysis universe (Q) is defined as the area or quantity requiring intervention, adjusted for the relevant exclusions; in the restoration categories, this universe is determined based on a baseline area of loss or degradation (Q_base) and the target restoration area (Q_2030); (ii) the unit cost (C) is determined based on the available evidence and, where applicable, using a lower bound (C_min) and an upper bound (C_max); and (iii) financing needs are calculated based on the area or quantity to be addressed, the unit costs, and the corresponding intervention period. For productive transition categories, this estimate is supplemented, where applicable, by a temporary income support component for producers during the transition period.

4.2 Management and Sustainable Use of Terrestrial and Marine Landscapes

The estimates of financing needs are organized around the category of terrestrial and marine production landscapes. The concept of production landscapes is understood in relation to territories where human activities manage or use natural resources—such as agricultural systems, production forests, and wild-capture fisheries—in line with the approach of the Convention on Biological Diversity (CBD) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) to managed production systems and the use of wild species.¹⁹

The methodology incorporates this analytical category to address financing needs associated with terrestrial and marine areas located outside protected areas and urban and peri-urban areas. While the regional analysis draws on the subcategories considered in the reference study, these are thematically reorganized and adapted to the regional context, resulting in a categorization that differs from that used in the original study. Additional subcategories relevant to Latin America and the Caribbean are also incorporated, such as ecosystem restoration that is not necessarily linked to productive uses.

Therefore, the classification presented below distinguishes between production landscapes managed through human activities, landscapes whose production is based on the use of wild resources, pressures on biodiversity affecting these territories, and actions aimed at restoring degraded ecosystems.

¹⁹ This clarification is introduced to avoid ambiguity, given that undisturbed ecosystems also provide provisioning, regulating, and supporting ecosystem services that underpin economic and social activities.

4.2.1 Managed Production Landscapes

This section examines crop agriculture, permanent meadows and pastures, and forest production, considering their importance for the region's economic and social development.²⁰

The approach is primarily aligned with KM-GBF Target 10, which promotes the sustainable management of areas under productive use and the reduction of impacts on biodiversity: “ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity,” for which it proposes, among other things, achieving a “substantial increase of the application of biodiversity friendly practices” (CBD, 2022a, p. 11). Although this is not explicitly mentioned as part of the target, it is understood that this objective is intended to ensure the sustainable management of all areas devoted to agricultural production.²¹

Likewise, by promoting the transition toward more sustainable production models, this approach can indirectly contribute to achieving other targets of the Framework, such as Target 7, on reducing pollution, and Target 11, which aims to ensure ecosystem services, particularly by improving soil health and maintaining processes such as pollination.

Timing of Transition Costs

From a methodological perspective, the analytical categories addressed in this section share a transition logic in which the financial requirements associated with adopting sustainable practices are concentrated in the initial stages and tend to decline toward the end of the transition period. This is because investment in fixed capital—including infrastructure, equipment, soil improvement, and replanting, among other items—as well as adjustments to production practices and initial technical assistance, are undertaken primarily at the beginning of the process and are subsequently integrated into the regular operation of production systems.

Accordingly, the estimation of financing needs for these three categories distinguishes between (i) the costs of transitioning to sustainable production models and (ii) temporary subsidies or income support for producers.²²

²⁰. These systems support employment and rural livelihoods, contribute to food security, and are integrated into strategic production chains, while also depending directly on biodiversity—for example, soil fertility and climate and water regulation—and potentially generating significant pressures if the transition toward sustainable practices does not take place.

²¹. Agricultural production is understood here in the broad sense, encompassing crop, livestock, fisheries, aquaculture, and forestry activities.

²². Transition costs are concentrated in the first year of adoption, while income support subsidies are distributed over different periods depending on the system—shorter periods for agriculture and grasslands and longer periods for forests—under a common methodological framework.

4.2.1.1 Agriculture and Crops

Agriculture is one of the sectors most dependent on biodiversity, as it relies on multiple ecosystem services, including soil fertility, pollination, biological pest control, and water and climate regulation. At the same time, it is one of the main drivers of habitat loss and degradation and biodiversity loss, as a result of land-use change, agrochemical pollution, excessive water consumption, soil erosion, and the introduction of potentially invasive alien species associated with production systems (World Economic Forum and PwC, 2020; IPBES, 2019).²³

In this context, the objective of this exercise is to quantify the annual financial effort required to steer crop agriculture toward nature-positive trajectories, reducing pressures on biodiversity while strengthening the resilience and productivity of agricultural systems. This entails promoting productive transformations that reduce soil degradation and deforestation associated with land-use change, improve water efficiency and governance, and incorporate agroecological practices and integrated pest management, with particular attention to family farming, Indigenous Peoples, and rural communities (FAO, 2021).

The transition to sustainable agriculture must also be socially and economically viable. This means that biodiversity-friendly practices should be designed and implemented gradually and in a territorially differentiated manner, while safeguarding food availability, rural producers' incomes, and the stability of the agri-food supply. It also requires strengthening productive capacities, particularly in family farming and in the territories of Indigenous Peoples and rural communities; promoting quality employment and gender equality; and recognizing the agricultural sector's dependence on ecosystem services such as soil fertility, water regulation, pollination, and biological pest control (FAO, 2021).²⁴

For the purposes of this study, the definition of cropland encompasses both arable land and permanent crops. The former is primarily used for short-cycle temporary crops—including cereals, legumes, and other annual crops—while the latter refers to longer-duration plantations, such as fruit trees, coffee, cocoa, and bananas (FAO, 2021).

To calculate C, the heterogeneity of agriculture across the region requires the use of robust cost ranges and measurement systems at the landscape scale. Accordingly, a cost range is defined, with a lower and an upper bound:

²³. In Latin America and the Caribbean, this relationship is particularly relevant given the importance of natural capital to development and the interaction between production systems and territories with high levels of biological diversity (OECD, 2018).

²⁴. In practice, this entails structural changes in production systems, supported by public and private investment, economic incentives, and coherent policies, with a focus on productive clusters and processes of change (Salazar-Xirinachs, 2023), to advance toward the sustainable management of areas dedicated to agricultural and livestock production.

- C_{min}: A micro/meso scale is used, drawing on case studies with per-hectare costs representative of transition packages that include technical assistance for relevant crops in the region. In particular, the main reference is the ex post evaluation of the NRM II Conservation Agriculture Project in Paraguay, which combines working capital investment and agricultural extension services as part of an intensive transition package. This value is interpreted as the baseline requirement for producers to adopt sustainable practices (KfW Development Bank, 2020). Studies on permanent crops in the region²⁵ report establishment and transition costs within comparable ranges, further supporting the plausibility of this lower bound.
- C_{max}: A recent macroregional top-down estimate by the Climate Policy Initiative (CPI, 2025) of annual financing needs for nature-positive agri-food systems in Latin America and the Caribbean is used. Based on this estimate, the agricultural component is isolated by excluding the portion attributed to livestock systems and land degradation, and the cumulative cost is derived over a four-year reference transition period.²⁶

To estimate temporary subsidies or income support for producers, the needs in this category include a complementary temporary financial support component aimed at mitigating potential declines in income and the materialization of financial risks during the transition period. This component is estimated based on the coverage of the support (the proportion of Q to which it would apply), combined with the annual amount of support for management practices per hectare (US\$/ha/year), derived from the value of agricultural production per unit of area reported by FAOSTAT.²⁷

Results of the Estimation

To estimate the needs arising from the transition in production models, the total regional cropland area is estimated at 176.2 million hectares, of which 10 million hectares are under organic farming systems (FAO, 2023c). This area is excluded as an operational approximation

²⁵ Field evidence from Honduras (agroforestry cocoa) and Peru (organic coffee) supports the methodology by identifying establishment costs, initial investments, and technical extension services. Although these cases involve diverse production systems, they share the logic of supporting the transition toward sustainable practices through farm-level investment and technical assistance.

²⁶ The macroregional estimate does not allow for the identification of the cost components (technical assistance, enabling infrastructure, incentives, or direct support) and is therefore interpreted as an upper-bound reference estimate. The temporary income support component is presented as complementary and should be interpreted with caution to avoid potential double counting.

²⁷ Since this indicator reflects the value of agricultural production and not necessarily the producer's net income or actual losses during the transition, it is used as a reference for developing temporary support scenarios rather than as a direct measure of income. The value is multiplied by the estimated transition period of four years, based on the literature reviewed.

based on the availability of comparable data at the regional level. Accordingly, the adjusted net area potentially subject to transition toward more sustainable practices is approximately 166.2 million hectares (regional Q).

For C_{min}, a reference value of US\$ 372/ha/year is used, equivalent to the annual transition cost per hectare, which combines initial investment and technical assistance services. Since the source provides an annualized value and the estimated average transition period is four years, the total amounts to US\$ 1,487/ha.²⁸ For C_{max}, a reference value of US\$ 585/ha/year is used, capturing the effort required both at the production unit level and in the regional support infrastructure. Since the estimates by CPI (2025) do not disaggregate the costs in question (e.g., costs of transitioning to sustainable models and/or income support), this parameter is interpreted as an annual macro-level figure. The total amount over four years is equivalent to US\$ 2,340/ha.

Thus, applying the unit transition costs to 166.2 million hectares over a 25-year horizon, annualized financing needs are estimated at approximately US\$ 9.886 billion per year for C_{min}, while the cost associated with C_{max} is approximately US\$ 15.556 billion per year over the same period. Consistent with the *Temporal Distribution of Interventions* assumption,²⁹ this range corresponds to an average implementation rate of approximately 6.6 million hectares transitioning per year across the region (166.2 million hectares divided by a 25-year horizon).

Regarding income support for producers, the reference values are an average agricultural production value of US\$ 2,987/ha (FAO, 2023c) and a cropland area of 166.2 million hectares.³⁰ Based on these values, two reference scenarios for income support are considered, assuming full coverage over the average transition period of four years: (i) lower relative intensity, in which annual support per hectare is approximately one-quarter of this reference agricultural value (≈US\$ 747/ha/year), with a cumulative cost of ≈US\$ 496.606 billion; and (ii) higher relative intensity, in which annual support is approximately 50% of the reference agricultural value (≈US\$ 1,494/ha/year), with a cumulative cost of ≈US\$ 993.211 billion.

²⁸. In accordance with the *Timing of Transition Costs* assumption mentioned at the beginning of Section 4.2.1, *Managed Production Landscapes*, these costs are assumed to be incurred in the first year of the transition process.

²⁹. See Section 4.1, *Cross-Cutting Methodological Aspects of the Chapter*.

³⁰. This module is estimated based on the area undergoing transition (Q), consistent with its temporary nature. However, in practice, the coverage of income protection instruments can be determined based on productive and social targeting criteria that fall outside the scope of this estimate.

Under the 2050 horizon, annualized income support requirements range from US\$ 19.864 billion per year (lower bound) to US\$ 39.728 billion per year (upper bound).³¹

Combining transition costs with income support requirements for producers during the period of practice change, total financing needs for the agricultural land subcomponent fall within the following range:

- Lower bound: US\$ 29.7498 billion per year.
- Upper bound: US\$ 55.2848 billion per year.

4.2.1.2 Permanent Meadows and Pastures

Grasslands are among the most extensive land-use and land-cover types on the planet, covering more than 80 million km², equivalent to over 54% of the world's land surface. Globally, they support the livelihoods of nearly 2 billion people, including approximately 500 million pastoralists and livestock producers whose food security depends on the health of these ecosystems. In addition to their critical role in food security, grasslands perform key water and climate regulation functions: they store nearly one-third of terrestrial carbon and contain approximately 33% of global biodiversity hotspots (UNCCD, 2024).³²

In Latin America and the Caribbean, grasslands are of strategic importance, covering approximately 25% of the region's territory. The livestock sector also plays a fundamental role in the region's economies. In response to growing global demand for animal products, the sector has expanded significantly and now accounts for approximately 46% of regional agricultural GDP, with average annual growth of 3.7% (FAO, 2018, cited in FAO, 2023b).³³

In line with KM-GBF Target 10, the objective of this analytical category is to quantify the annual financing required to support the transition of grasslands toward nature-positive trajectories by expanding biodiversity-friendly practices. Accordingly, this approach prioritizes the adoption

³¹ These values constitute a sensitivity analysis to estimate orders of magnitude, rather than a proposal for the universal application of income support. In practice, support schemes could be targeted at small-scale producers, family farming, degraded areas, territories at greater risk of income losses, or areas where the transition entails more disruptive investments. This targeting is not estimated due to the lack of comparable regional data.

³² Nearly 50% of the world's grasslands show some degree of degradation, reflected in declining soil fertility, soil erosion, and biodiversity loss (UNCCD, 2024). Despite their ecological and socioeconomic importance, grasslands have received less attention in conservation agendas than forests, whose loss often prompts a more immediate public response (International Livestock Research Institute et al., 2021).

³³ It also makes a significant contribution to global food and nutrition security: the region produces slightly more than 23% of the world's cattle and buffalo meat (FAO, 2016, cited in FAO, 2023b). Family farming accounts for more than half of employment in the agricultural sector, making livestock production an important source of income and underscoring its socioeconomic importance for the most vulnerable rural populations (FAO, 2023b).

of sustainable livestock production models—such as silvopastoral systems, adaptive pasture management, and regenerative practices—that can reconcile economic productivity with the restoration of ecosystem services and the preservation of natural capital for future generations.

For the purposes of this exercise, the FAO classification is adopted, defining the scope of this category as “permanent meadows and pastures” (land used for forage for five years or more), which includes the categories of natural or semi-natural permanent grasslands and cultivated permanent grasslands.

Because livestock production is less heterogeneous than crop farming, a larger number of case studies is available for this analytical category than for the crop farming category. Nevertheless, given the high degree of heterogeneity across production systems and the presence of extreme values associated with more technologically intensive or management-intensive models, which result in an asymmetric distribution, the median is used as the representative value for the estimated costs. For the calculation of C, a cost range was defined, with a lower and an upper bound:

- C_{min}: A micro/meso scale is used, drawing on case studies with per-hectare costs representative of transition packages based on management measures that do not entail major structural changes, such as livestock nutritional supplementation, fertilization, and pasture reseeding. The costs are expressed as total values (not annualized), so they do not need to be aggregated over the estimated average transition period.
- C_{max}: A micro/meso scale is used, drawing on case studies with per-hectare costs representative of transition packages based on well-structured silvopastoral or agroforestry systems. The costs are expressed as total values (not annualized), so they do not need to be aggregated over the estimated average transition period.

For the estimation of temporary subsidies or income support for producers, as in the *Agriculture and Crops* category, the needs in this category include an additional component for temporary income support to producers. This support is intended to mitigate potential income losses and address financial risks that may arise during the transition period. This component is estimated based on the coverage of the support (the proportion of Q to which it would apply), combined with the annual support amount per hectare (US\$/ha/year), derived from the annual gross margin per hectare estimated for various traditional livestock production systems in Argentina, Chile, Ecuador, Paraguay, and Uruguay during the 2019–2021 period (FAO, 2022a). These analyses include cow-calf systems and representative low, medium, and high-intensity production models. Finally, this amount is multiplied by the estimated average transition period for this category, which is four years based on the literature reviewed.³⁴

³⁴. According to the literature referenced in this section, both in terms of investment recovery and the consolidation of practices at the farm level, the estimated average transition period ranges from three to five years from the start of the transition, resulting in an average of four years.

Results of the Estimation

For the estimation of the financing needs associated with the transition of the production model, the regional area of permanent meadows and pastures is estimated at 484.3 million hectares (FAO, 2023c), of which approximately 85 million hectares are under silvopastoral systems (Chamorro-Vargas et al., 2025). Accordingly, the adjusted net area potentially subject to transition toward more sustainable practices is 399.3 million hectares (regional Q).

For C_min, a reference value of US\$ 741/ha is adopted, equivalent to the representative cost of management measures that do not entail major structural changes. For C_max, a reference value of US\$ 2,143/ha is adopted, equivalent to the representative cost of well-structured silvopastoral or agroforestry systems.

Consequently, applying the transition unit costs to the 399.3 million hectares and considering a 25-year horizon, annualized financing needs amount to approximately US\$ 11.839 billion per year for C_min, while the cost associated with C_max amounts to approximately US\$ 34.224 billion per year over the same horizon. In line with the *Temporal Distribution of Interventions* assumption,³⁵ this range is consistent with an average implementation rate of approximately 15.9 million hectares undergoing transition per year across the region (399.3 million hectares divided by a 25-year horizon).

Regarding income support for producers, as with the costs of implementing sustainable grassland management practices and for the same methodological reasons, the median is used as the representative value, with a reference gross livestock margin of US\$ 1,950/ha (FAO, 2022a). This value, together with the area of permanent meadows and pastures, is used to define two income support scenarios over the average transition period of four years: (i) lower relative intensity, in which annual support per hectare is approximately one-quarter of the reference gross margin ($\approx$ US\$ 488/ha/year); and (ii) higher relative intensity, in which annual support is approximately 50% of the reference gross margin ($\approx$ US\$ 975/ha/year). This support is intended to mitigate producers' financial risks while the transition across the region's grassland area is completed. Under the 2050 horizon, annualized income support requirements are approximately US\$ 31.151 billion per year (lower bound) and US\$ 62.302 billion per year (upper bound).

Therefore, by adding transition costs to the costs associated with income support for producers during the transition period, the total financing needs for this category fall within the following range:

- Lower bound: US\$ 42.98994 billion per year.
- Upper bound: US\$ 96.52563 billion per year.

³⁵. Included in the section *Cross-Cutting Methodological Aspects of the Chapter*.

4.2.1.3 Forest Production

Forests perform essential ecological, social, and economic functions: they regulate climate and water cycles, store carbon, support rural and Indigenous livelihoods, and constitute the most species-rich terrestrial ecosystems on the planet (FAO, 2024b; FAO and UNEP, 2020; IPBES, 2019). Latin America and the Caribbean has approximately 947 million hectares of forest—roughly one-quarter of the world’s forest area—and forests cover nearly 49% of its land area (FAO, 2020; FAO, 2025a). Despite this wealth, the region has experienced a sustained decline in forest area, driven primarily by the expansion of the agricultural frontier, land-use change, and forest fires (FAO, 2025a); approximately 70% of global primary tropical forest loss is concentrated in the region, particularly in the Amazon Basin and Mesoamerica (WRI, 2025).

This component focuses on forests with productive potential and estimates the financing needs associated with their sustainable management in Latin America and the Caribbean, as an input for aligning forest policies with biodiversity and climate objectives.³⁶ The calculation adopts a transition perspective: it assumes that the universe of uncertified hectares in production and multiple-use forests constitutes the area potentially subject to transition toward practices equivalent to recognized standards, using certification as a proxy.

The relevant forest area (Q) is approximated by summing the areas of forest designated primarily for production and for multiple uses, as reported in the FAO Global Forest Resources Assessment (FAO, 2025a). To estimate certified hectares, the indicator “forest area under an independently verified forest management certification scheme” from the Regional Data Bank for Statistical Follow-up to the Sustainable Development Goals in Latin America and the Caribbean, corresponding to 2024, is used.

For the calculation of C, a range of per-hectare unit costs is derived from publicly available corporate information, estimated as the ratio between reported investments associated with sustainable management practices and the corresponding certified area. The lower bound (C_min) is approximated based on evidence reported by Arauco (Celulosa Arauco y Constitución, 2025a), while the upper bound (C_max) is based on evidence reported by CMPC (Empresas CMPC, 2024). Because no homogeneous and directly comparable regional parameter for transition costs per hectare is available, this range is used as a proxy for the cost of transitioning toward sustainable standards and practices that can be observed through certification.

³⁶. It is acknowledged that the full heterogeneity of forest types, harvesting intensity, tenure arrangements, institutional capacities, and governance modalities cannot be captured. The exercise is therefore intended as an approximate estimate based on explicit and traceable assumptions.

For the exploratory income support module, a six-year reference transition period is defined, consistent with the available information, and annualized results through 2050 are presented. The transition toward more sustainable forest management practices may require temporary income support for forest producers, particularly when they face additional compliance and verification costs, greater operational risks, or liquidity constraints during the initial stages of adoption (Nasi et al., 2011). This component is estimated based on the area undergoing transition (Q), the coverage of the support, an annual amount per hectare derived from observable forestry incentives, and the number of years for which such support would be provided.

Results of the Estimation

The regional area of production and multiple-use forests is 136.9 million hectares (FAO, 2025b). Hectares certified under an independently verified certification scheme amount to 19.6 million hectares (14.3%). Accordingly, the uncertified area, used as an operational approximation of the universe potentially subject to transition or improvement, is estimated at 85.7% (117.3 million hectares). Using this Q and the operational range of per-hectare unit costs defined for the subcomponent in the methodological section, the financing needs for the region are estimated.

For C_{min}, a unit cost of US\$ 227.4/ha is adopted. This value is interpreted as a proxy for the per-hectare cost of transitioning toward sustainable standards and practices observable through certification. For C_{max}, a unit cost of US\$ 313.2/ha is used. This value serves as a proxy for the transition cost per hectare in contexts involving more stringent technical, compliance, monitoring, and certification requirements.

Accordingly, applying unit transition costs ranging from US\$ 227.4 to US\$ 313.2/ha to the estimated area requiring transition (Q=117.3 million hectares) yields an estimated financing requirement of approximately US\$ 26.690 billion at the lower bound and US\$ 36.750 billion at the upper bound.³⁷ Assuming implementation is phased in progressively and linearly over a 25-year horizon, through 2050, the average annual cost ranges from US\$ 1.0676 billion to US\$ 1.4701 billion.

³⁷ These figures should be interpreted as an approximate estimate of the financing needs associated with the transition to sustainable practices in the region's forestry production, limited to production and multiple-use forests.

Regarding producer support, the reference values used are the incentive amounts for forest plantations published by Guatemala's National Forest Institute under the Incentive Program for Smallholders of Forest- or Agroforestry-Suitable Land (PINPEP)³⁸ (Instituto Nacional de Bosques, n.d.). Under a six-year temporary support horizon, consistent with the incentive cycle, which prioritizes establishment in the first year and includes maintenance phases through the sixth year, two reference values are used for average annual support per hectare: US\$ 297.4 and US\$ 395.8/ha/year. Based on the regional area undergoing transition, two exploratory coverage scenarios are developed:

- *Targeted scenario*: considers coverage of 30% of the regional area and applies average annual support of US\$ 395.8/ha/year. This scenario approximates a priority intervention targeting small-scale producers and dispersed areas, with a cumulative requirement of US\$ 83.612 billion.
- *Regional-scale scenario*: considers coverage of 70% of the regional area and applies average annual support of US\$ 297.4/ha/year. This scenario reflects a large-scale policy encompassing different farm sizes, with a cumulative requirement of US\$ 146.590 billion.

For the 2050 horizon, producer support is estimated at between approximately US\$ 3.345 billion and US\$ 5.864 billion per year. These figures represent an estimate of the financing required for temporary support during the forest transition, aimed at mitigating liquidity constraints in the early stages of adoption. They should not be interpreted as official targets or country commitments. The analysis focuses on the effort required to expand the adoption of sustainable standards and practices across the estimated uncertified area. Accordingly, these values should be considered indicative estimates of the scale of financing required for the regional assessment, subject to data availability and the methodological assumptions used.

Therefore, combining transition costs with those associated with income support for producers during the transition period, total financing needs fall within the following bounds:

- Lower bound: US\$ 4.4121 billion per year.
- Upper bound: US\$ 7.3337 billion per year.

³⁸ The values used are consistent with the ranges observed in forest incentive programs across the region. In Costa Rica, the Payment for Environmental Services Program, administered by the National Forestry Financing Fund (FONAFIFO), provides incentives for forest plantations over a six-year period, with annual payments ranging from US\$ 207.97 to US\$ 415.94 per hectare, depending on the payment year. In Mexico, the Sustainable Forest Development for Wellbeing Program of the National Forestry Commission (CONAFOR), Component II, under the 2025 call for proposals, reports support ranging from US\$ 343.07 to US\$ 496.84 per hectare, based on national and territorial reference values. These figures serve to verify the consistency of the estimated support amounts.

4.2.2 Production Landscapes Based on Wild Resources

Unlike production landscapes directly managed through agricultural, livestock, or forestry activities, this category encompasses production systems based on the use of wild resources. In these cases, production depends primarily on the ecological dynamics of ecosystems and the natural availability of harvested species, meaning that the sustainability of these activities is linked to the conservation status of these ecosystems. Likewise, strengthening sustainable management schemes in these systems can indirectly contribute to achieving KM-GBF Target 1, which aims to ensure that all terrestrial and marine areas are subject to planning and management processes that reduce biodiversity loss and maintain ecosystem integrity.

Within the framework of this analysis, this category is addressed through wild-capture fisheries, whose sustainable management is key to maintaining livelihoods, food security, and the ecological balance of marine and coastal ecosystems.

4.2.2.1 Wild-Capture Fisheries

The overexploitation of wild fishery resources (overfishing) is the main driver of biodiversity loss and degradation in the oceans (IPBES, 2019). This phenomenon is linked to various fishing activities, including those associated with illegal, unreported, and unregulated fishing (IUU fishing), which artificially reduce operating costs and incentivize overexploitation. These practices contribute to the depletion of fish stocks and the degradation of marine ecosystems, while negatively affecting food security and the incomes of legal fishers and coastal communities (FAO, n.d.-c; ECLAC, 2025b).

Despite growing recognition of the need to strengthen sustainable fisheries management, the proportion of overexploited or collapsed fish stocks continues to increase (FAO, 2024a). In addition, available assessments tend to underestimate the level of risk faced by fish stocks.³⁹

Wild-capture fisheries constitute one of the few large-scale production sectors that depend directly on wild populations. Unlike agriculture or livestock production—which are based on domesticated systems—extractive fishing relies on renewable biological resources whose status and location vary according to natural ecological dynamics and the health of marine ecosystems. Many of these populations are migratory or transboundary, increasing the complexity of their management and requiring more robust governance, monitoring, and control systems than those used in other production sectors (FAO, 2024a; Costello et al., 2019).

³⁹. An analysis of more than 230 fisheries worldwide found that models do not adequately reflect the status of fish stocks and that up to an additional 85% of stocks identified as collapsed could have biomass levels below 10% of their historical maximum (Edgar et al., 2024). Furthermore, global fishing capacity is estimated to be 1.5 to 2.5 times higher than what is required to achieve maximum sustainable yield (Sumaila et al., 2012).

In Latin America and the Caribbean, the status of fisheries is heterogeneous, but the overall trend shows signs of deterioration. Regional fisheries productivity declined from 15.5 tons per fisher in 1990 to 7.1 tons in 2022, affecting incomes in the sector (ECLAC, 2025b). Approximately 2.5 million people in the region are directly engaged in primary fisheries production, although this figure could double when unregistered workers and ancillary activities are taken into account (ECLAC, 2025b).⁴⁰

Methodological Approach

Fisheries productivity can improve through more effective management of harvested stocks that reduces overfishing, IUU fishing, and non-marketable discards (Konar and Ding, 2020). The estimation of financing needs for the region's marine fisheries focuses on quantifying the costs of transitioning to sustainably managed capture fisheries, based on the regional catch volume (Q), with a variant used for the sensitivity analysis, and management costs per ton of catch under management schemes that are more sustainable than the current business-as-usual (BAU) system.

Following the approach of Deutz et al. (2020), the analysis considers only the financing needs associated with improving wild-capture fisheries management.⁴¹ Mangin et al. (2018) is used as a reference for estimating costs. Drawing on a bioeconomic database developed by Costello et al. (2016), these authors estimate the incremental costs of different management systems compared with the BAU baseline scenario.

In this model, catch-control (CC) management entails costs approximately 80% higher than those under BAU, while catch-share (CS) management has costs approximately 25% higher than those under CC.⁴² This study applies these relationships to the average regional catch volume for the 2017–2019 period, using data from FishStat (FAO, 2024c) and reconstructed estimates from the Sea Around Us initiative that incorporate unreported catches (Pauly et al., 2020). The reference cost for the BAU system is US\$ 81 per ton for developing countries (US\$ 122.7 per ton at 2025 prices) (Mangin et al., 2018). The lower bound corresponds to the CC scheme, while the upper bound corresponds to the CS scheme. Unlike the original

⁴⁰. Fisheries also play an important role in the food security of coastal communities and the Small Island Developing States of the Caribbean, where 12.9% of consumed animal protein comes from the sea, a share that reaches nearly 20% in countries such as Antigua and Barbuda and Barbados.

⁴¹. Aquaculture—which follows a different production model—and the elimination of harmful subsidies, which is addressed later in the section on resource reallocation, are not included. Nevertheless, eliminating or redirecting these incentives is necessary to reduce overfishing and advance the sector's sustainability.

⁴². These costs comprise administration (33%), enforcement (39%), and research (28%).

exercise—which compares scenarios at two points in time (2012 and 2050)—this analysis treats management costs as a constant annual flow over a 25-year horizon through 2050, subtracting the cost under the BAU scenario to obtain the incremental cost of sustainable management.

Results of the Estimation

The average catch volume between 2017 and 2019 estimated by the Sea Around Us initiative was 14.6 million tons, approximately 2 million more than the volume reported by FAO (12.7 million tons). The Sea Around Us estimate was selected as Q to define the lower and upper bounds because it provides a more realistic approximation of the magnitude of the challenge involved in the transition to sustainability. However, it should be noted that estimating IUU fishing is particularly complex and that even the Sea Around Us figures may be underestimated. Regarding costs, the lower bound uses the cost of catch-control (CC) management, equivalent to US\$ 220.9 per ton, while the upper bound uses the cost of catch-share (CS) management, equivalent to US\$ 276.1 per ton.

The annual regional cost of catch-control (CC) management is estimated at US\$ 3.2273 billion, while the annual cost of catch-share (CS) management amounts to US\$ 4.0341 billion. In turn, the annual cost of the conventional system (BAU) is estimated at US\$ 1.7929 billion. Accordingly, transitioning all fisheries to a catch-control or catch-share system—whether individual or collective—would entail, over a 25-year horizon through 2050, a total cumulative cost ranging from US\$ 80.6833 billion to US\$ 100.8541 billion, respectively, while the cumulative cost of the conventional system (BAU) would be US\$ 44.824 billion.

For the purposes of this study, the incremental cost of sustainable management relative to the conventional system is estimated. Accordingly, the corresponding BAU scenario cost is subtracted from the total cost of the CC and CS management systems. Thus, the cumulative incremental cost ranges from US\$ 35.8692 billion at the lower bound to US\$ 56.0301 billion at the upper bound. Annualizing these values over a 25-year horizon yields the lower and upper bounds. In summary, this range represents the additional resources that would need to be invested each year, above and beyond the investment associated with the current conventional system—which is assumed to remain constant—to sustainably manage the region's fishery resources.

- Lower bound: US\$ 1.4343 billion per year.
- Upper bound: US\$ 2.2412 billion per year.

4.2.3 Pressures on Biodiversity in Terrestrial and Marine Landscapes

Pressures on biodiversity in terrestrial and marine landscapes are a central component of the financing needs associated with the sustainable management of production landscapes.⁴³ In this context, this analysis includes a specific category addressing pressures that affect both managed production landscapes and systems based on wild resources. In particular, it considers two priority areas for intervention: reducing water pollution in rural areas and managing invasive alien species. The inclusion of these pressures reflects their relevance to Latin America and the Caribbean, their cross-cutting impacts on production systems and the ecosystems that sustain them, and the need to mobilize resources to reduce their effects on biodiversity and the ecosystem services on which multiple economic activities depend (Deutz et al., 2020; Bello, 2023; ECLAC, 2024d).

4.2.3.1 Water Treatment in Rural Areas⁴⁴

As part of the estimation of measures aimed at reducing pollution of water sources in rural areas, the investment costs associated with expanding coverage and rehabilitating drinking water and basic sanitation infrastructure were calculated. These investments are considered a relevant component of the costs required to improve wastewater management and reduce pollution pressures on water sources in rural areas.

Methodological Approach

This estimate is based on the methodology developed by Saravia Matus et al. (2023), which uses a unit-cost approach to calculate the investment needs required to achieve safely managed drinking water and sanitation services. This approach begins by identifying the population that does not yet have access to these services and the unit costs associated with expanding coverage, as well as the investments required to renew and rehabilitate existing infrastructure over its service life. In the reference study, these estimates are based on disaggregated variables—such as the population to be served and unit expansion costs—and are complemented by calculations of investments required to renew the sector's infrastructure stock.

⁴³. These pressures arise from factors such as pollution, the introduction and spread of invasive alien species, and other production-related externalities that affect ecosystem integrity and their capacity to sustain essential services for the economy and human wellbeing. These factors are among the main drivers of biodiversity loss at the global and regional levels, making it necessary for financing strategies to incorporate prevention, control, and mitigation measures (Deutz et al., 2020; OECD, 2020).

⁴⁴. A similar estimate is presented below for the water treatment category in urban areas.

For the purposes of this exercise, the consolidated values reported in the study for the 2020–2030 period are used. The original estimates are expressed in 2022 dollars and were therefore updated to constant 2025 values by applying the corresponding deflator. The total estimated amount for the period was then distributed linearly over the ten-year period to obtain an approximate annual investment requirement.

Results of the Estimation

Under the assumptions described above, the estimated investments associated with managing water pollution in rural areas amount to US\$ 68.964 billion for expanding sanitation coverage and US\$ 16.279 billion for renewing and rehabilitating existing infrastructure, for a total of US\$ 85.243 billion. The annualized investment value, considering a 2050 horizon, is presented below.

- Estimated value: US\$ 3.410 billion per year.

4.2.3.2 Invasive Alien Species Management

The introduction of invasive alien species is one of the five direct drivers of biodiversity loss with the greatest global impact, as identified based on the available scientific evidence (IPBES, 2019).⁴⁵ However, in the region, this issue remains relatively little known and is primarily recognized among specialists. At the regional level, the cumulative cost of invasive alien species (IAS) in Latin America and the Caribbean between 1975 and 2020, considering only the most robust data, is estimated at approximately US\$ 102.5 billion (Heringer et al., 2021), while the cumulative global cost between 1970 and 2020 exceeds US\$ 1.738 trillion. The global cost of IAS exceeded US\$ 423 billion per year in 2019 and is growing exponentially, tripling or quadrupling every decade. For Latin America and the Caribbean, economic losses from IAS are projected to exceed US\$ 20 billion per year by 2030 if effective measures are not implemented (IPBES, 2023; Diagne et al., 2021).

Eliminating, minimizing, or reducing invasive alien species, or mitigating their impacts on biodiversity and ecosystem services, is a complex task given the enormous variety of invasive and potentially invasive species, the different habitats they invade and the conditions of those habitats, the pathways through which they are introduced, their rates of spread, and the prevention and control measures required for each species. In addition, the recent available

⁴⁵ Conceptually, invasive species are those that, when introduced accidentally or deliberately outside their natural habitat, become established and spread, causing significant adverse effects on local ecosystems. Their success in new areas can be attributed, among other factors, to the absence of local predators, shorter reproductive cycles, and high adaptive plasticity. They may prey on or compete with endemic species, or displace other species by competing for space or food, thereby altering ecosystems and causing local, regional, or global extinctions (WWF, 2024).

evidence on invasive species management focuses on estimating the expenditures incurred by national governments for prevention, management, and addressing damage based on observed cases. However, there are no projections or estimates of a minimum or optimal amount or percentage required to address this issue in a reasonable and sustained manner.

Methodological Approach

The financing needs for invasive alien species management in Latin America and the Caribbean are estimated using a proxy constructed based on a review of the regional and global literature and an analysis of the available databases. This approach is necessary because the reference studies do not directly estimate financing needs, but rather the costs incurred by countries in different areas of invasive alien species management at the national and global levels.

The estimate considers costs incurred by countries in the region for the management, control, and prevention of IAS, as well as for addressing the damage they cause. To this end, it uses the INVACOST V4.1 database (Leroy et al., 2021; Diagne et al., 2020), which contains information on the costs associated with biological invasions worldwide and is updated as new information becomes available (Leroy et al., 2021). The data covers the period 2000–2022 and includes only countries in the region for which information is available, using data classified as having higher levels of reliability (observed and high reliability), in line with the methodology used by Diagne et al. (2021) and Heringer et al. (2021).⁴⁶

Results of the Estimation

The analysis shows that the total cumulative cost associated with IAS for the 2000–2022 period in the countries of the region exceeds US\$ 121 billion at constant 2025 prices. The median of annual costs is US\$ 411 million per year.

The proxy for annual financing needs for 2025 amounts to US\$ 32.9 million. For the purposes of this exercise, the annual value estimated using the proxy is assumed to represent the investment made in 2025. Based on this value, the growth rate (g) is applied over a five-year period, through 2030, in line with the horizon established by the corresponding KM-GBF target. The growth rate is $g = 0.116123$ per year, equivalent to an approximate annual increase in costs of 11.6%. As a result, the estimated amount for 2030 is as follows.

- Estimated value: US\$ 57 million per year.

⁴⁶ Given the variability in annual costs, the median for the period is used to estimate a proxy for annual management, control, and prevention needs, equivalent to 8% of this value, which is the average share allocated to these activities globally (IPBES, 2023). It is also assumed that costs associated with invasive species in the region increase at the same rate as the global average: according to Diagne et al. (2021), they triple every decade. This rate is annualized to project the estimate through 2030.

4.2.4 Restoration of Priority Ecosystems

The restoration of priority ecosystems is one of the most direct pathways for recovering ecological functions, reconnecting habitats, and reversing biodiversity loss in Latin America and the Caribbean. This section estimates the financing needs associated with restoring the ecosystems considered to have the greatest potential and urgency in the region, organized into four categories: marine and coastal ecosystems—mangroves, seagrass meadows, salt marshes, and coral reefs—tropical and subtropical forests, Andean páramos, and peatlands. In all cases, following the common methodological structure described in Section 4.1, the target restoration area for 2030 (Q₂₀₃₀) corresponds to 30% of the area with documented loss or degradation (Q_{base}), in line with KM-GBF Target 2.⁴⁷ The estimates for each of the restoration categories considered in the study are presented below, beginning with the restoration of marine and coastal ecosystems.

4.2.4.1 Restoration of Marine and Coastal Ecosystems

More than 70% of the Earth's surface is covered by oceans, which are home to diverse marine and coastal ecosystems that are ecologically and functionally interdependent. Both are part of an ecosystem continuum that connects terrestrial, coastal, and oceanic environments and supports an enormous share of the planet's biodiversity and ecosystem services.

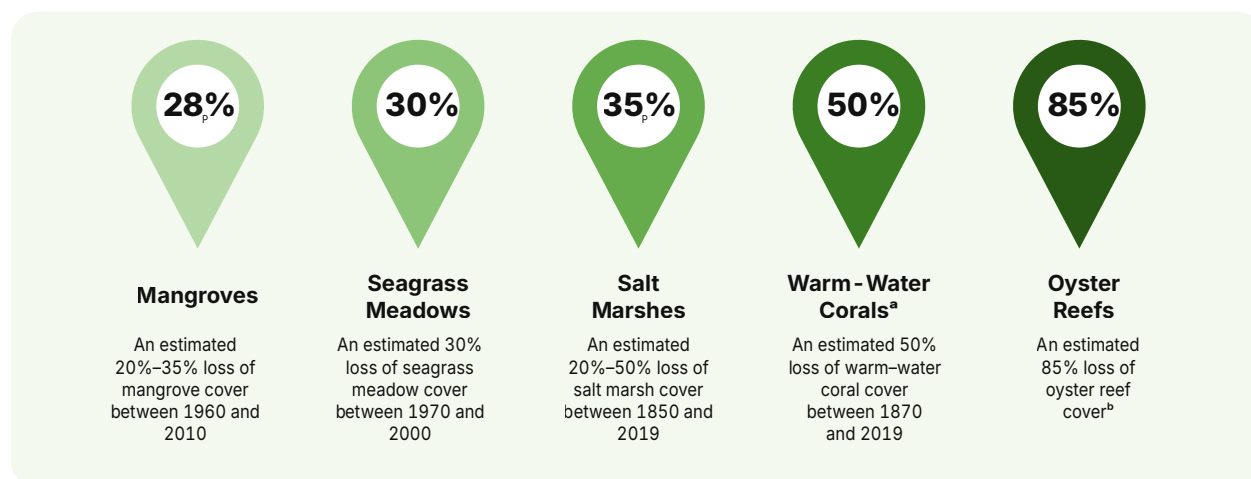
In particular, marine and coastal ecosystems, including plant-dominated ecosystems—mangroves, seagrass meadows, and salt marshes—and animal-dominated ecosystems—coral and oyster reefs—act as transition zones between terrestrial and marine ecosystems, enabling the continuous exchange of matter, energy, and species. In this sense, these ecosystems not only help regulate the flows of nutrients and sediments from terrestrial watersheds to the sea, thereby controlling the productivity and quality of marine waters (Barbier et al., 2011; IPBES, 2019), but also serve as refuge, feeding, and breeding grounds for numerous marine species (FAO, 2022b). The degradation and loss of coastal ecosystems directly affect marine biodiversity by weakening the dynamic and interdependent connectivity between land and sea and the resilience of marine ecosystems, while also reducing the availability of essential habitats for multiple marine species, both commercial and non-commercial.

Recent estimates of changes in the area or extent of natural habitats at the global level point to significant impacts across all the coastal ecosystems mentioned above, as illustrated in Diagram 1.

⁴⁷ The methodological specifics of each category—regarding the sources used to estimate Q_{base} and the recovery horizon (T)—are detailed in the section on each ecosystem.

DIAGRAM 1

Estimates of Changes in the Area of Coastal Ecosystems at the Global Level



Source: Economic Commission for Latin America and the Caribbean, based on UNEP World Conservation Monitoring Centre. (n.d.). *Ocean+ Habitats Initiative: Estimated global change in habitat extent*. Retrieved November 21, 2025, from <https://habitats.oceanplus.org/>; and Malmquist, D. (2011, February 3). *Loss of oyster reefs a global problem, but one with solutions*. Virginia Institute of Marine Science. https://www.vims.edu/newsandevents/topstories/archives/2011/oyster_reef_global.php.

P: average value of the estimated loss.

^a More than 350 species of deep-sea corals (>100 m depth) have been documented in the Caribbean region and are included in the category of cold-water corals. However, to date, no estimates have been identified, either at the global or regional level, of changes in the area of these ecosystems.

^b Estimate based on historical records collected between 20 and 130 years ago.

Methodological Approach

For the four key marine and coastal ecosystems, the reference area (Q_{base}) is estimated based on data availability for each ecosystem—mangroves, seagrass meadows, salt marshes, and coral reefs—and financing needs are calculated using the expression $Q_{2030} \times C_{total}$, where C_{total} corresponds to the annual unit restoration cost multiplied by the number of periods over which the intervention is required.

The approach draws on previous economic assessments of the restoration of these types of ecosystems at the global level and on available regional evidence. Given the aggregate nature of the sources used, the exercise does not fully capture the heterogeneity of restoration contexts across the region—for example, variations in ecosystem types, degrees of degradation, accessibility, tenure arrangements, institutional capacities, and governance modalities. The analysis uses comparable assumptions and ranges of annual unit costs to estimate the magnitude of financing needs.

In this study, defining the Q_{base} parameter is challenging because of the limited availability of data in several countries in the region and the heterogeneity of technical and methodological capacities to estimate the extent of each key ecosystem over time. Ideally, the reference universe—that is, the regional area on which to calculate the 30% restoration target for 2030, as established under KM-GBF Target 2—would be derived from a historical baseline. This would correspond to the area recorded decades ago, from which the current or most recent extent of the ecosystem would be subtracted. In practice, however, estimates of the total area of certain ecosystems in past periods are often unreliable or highly limited. Moreover, recent estimates tend to report larger values, mainly because they include new areas or countries that were not previously considered due to methodological or technical capacity constraints. This situation creates apparent inconsistencies, since, at the same time, robust evidence is available on the net loss rates of these ecosystems over the period analyzed. Consequently, with the exception of coral reefs, a global reference loss rate was used to estimate the historical regional extent of the other marine and coastal ecosystems considered, because it was not possible to identify official or institutional sources with reliable historical values for regional coverage.

Results of the Estimation

Mangroves

- Current regional extent = 4.09 million hectares (FAO, 2025a).
- Regional baseline (2000) = 4.21 million hectares (ECLAC, n.d.-b).
- Area lost (Q_{base}) = 0.12 million hectares.
- Average mangrove restoration cost.
 - C_{min} = US\$ 2,518.8/ha/year (Convention on Wetlands, 2025).
 - C_{max} = US\$ 4,130.9/ha/year (Bayraktarov et al., 2016).
- Recommended minimum average intervention period (T) = 5 years (Bosire et al., 2008; Bayraktarov et al., 2016; Murdiyarso and Ambo-Rappe, 2023).

Lower bound for mangroves: US\$ 89.84 million per year.

Upper bound for mangroves: US\$ 147.34 million per year.

Seagrass Meadows

- Current seagrass meadow extent = 4.62 million hectares (UNEP World Conservation Monitoring Centre [UNEP-WCMC], n.d.).
- Global loss rate (1970–2020) = 16.3% (Convention on Wetlands, 2025).
- Estimated area lost in the region (Q_{base}) = 0.9 million hectares.

- Average global seagrass restoration cost (C) = US\$ 19,876/ha/year (Convention on Wetlands, 2025).
- Recommended minimum average intervention period (T) = 3.5 years (van Katwijk et al., 2016; Unsworth et al., 2019; Orth et al., 2006).

Estimated value for seagrass meadows: US\$ 3,748.7 million per year.

Salt Marshes

- Current salt marsh extent = 3.6 million hectares (UNEP-WCMC, n.d.).
- Global loss rate (1970–2020) = 14.02% (Convention on Wetlands, 2025).
- Estimated area lost in the region (Q_base) = 0.59 million hectares.
- Average global salt marsh restoration cost (C) = US\$ 31,272/ha/year (Convention on Wetlands, 2025).
- Average duration of restoration interventions (T) = 7.5 years (Worthington et al., 2024; Campbell et al., 2022).

Estimated value for salt marshes: US\$ 8,254.5 million per year.

Coral Reefs

- Current coral reef extent = 1.12 million hectares (UNEP-WCMC et al., 2021).
- Regional baseline (2000) (Q_base) = 1.9 million hectares (Spalding et al., 2001).
- Area lost (Q_base) = 0.79 million hectares.
- Average global coral reef restoration cost (C) = US\$ 40,335/ha/year (Convention on Wetlands, 2025).⁴⁸
- Recommended minimum average intervention period (T) = 4 years (Lange et al., 2024).

Estimated value for coral reefs: US\$ 7,626 million per year.

⁴⁸. Estimates for coral restoration in the Caribbean indicate higher costs (Narayan et al., 2019): US\$ 822,600 per hectare for fragment planting and US\$ 1,652,914 per hectare for structural reef restoration, in 2019 values. However, given the limited number of available studies—three and four, respectively—these estimates were not included in the analysis. The costs considered may therefore underestimate the financing needs for coral restoration.

4.2.4.2 Restoration of Forests

Forest restoration in Latin America and the Caribbean has become a strategic priority for addressing environmental degradation, biodiversity loss, and climate change.⁴⁹ Restoring degraded forest landscapes helps restore habitats and ecological connectivity and strengthens ecosystem services associated with water regulation, soil protection, and the resilience of territories to extreme events. At the same time, the region is home to some of the most biodiverse ecosystems on the planet, but faces significant pressures associated with deforestation, agricultural and livestock expansion, unsustainable resource extraction, and forest fires (FAO and UNEP, 2020; ECLAC, 2024a; FAO, 2025a).

Various analyses estimate that approximately 650 million hectares of degraded and deforested landscapes in Latin America and the Caribbean offer opportunities for restoration, including forests, agricultural land, and other land uses (WRI, 2014; Vergara et al., 2016). This potential far exceeds current commitments, but provides an indication of the scale of the task ahead to restore ecological functions and ecosystem services in the region (Vergara et al., 2016).

In response, governments, multilateral institutions, civil society organizations, and the private sector have made specific commitments. These include Initiative 20x20, under which 17 countries have committed to protecting and beginning to restore approximately 50 million hectares of degraded forests, agricultural land, and grasslands by 2030 (WRI, 2024). As part of the United Nations Decade on Ecosystem Restoration 2021–2030, which aims to halt and reverse ecosystem degradation globally, FAO and the Latin American and Caribbean Forestry Commission report that, as of 2025, approximately 568,874 hectares have been restored or are undergoing direct restoration, and nearly 14 million hectares are under improved practices involving the recovery of ecosystem services in 22 countries (Latin American and Caribbean Forestry Commission, 2025).

Methodological Approach

The approach draws on previous economic assessments of the restoration of these types of ecosystems and on available regional evidence to estimate orders of magnitude at the regional level. Given the aggregate nature of the sources used, the exercise does not fully capture the heterogeneity of restoration contexts across the region—for example, variations in forest

⁴⁹. Forest restoration involves actions to recover the structure, composition, and functions of degraded forest ecosystems through assisted regeneration, restoration planting, and agroforestry systems (Vergara et al., 2016). It also contributes to territorial protection, the preservation of traditional practices, job creation, and food security for rural communities, Indigenous Peoples, and local communities (FAO and UNEP, 2020). This analysis estimates the order of magnitude of the resources required to restore degraded forest landscapes in Latin America and the Caribbean, in line with the commitments and targets of the KM-GBF.

types, degrees of degradation, accessibility, tenure arrangements, institutional capacities, and governance modalities. Accordingly, the analysis uses comparable assumptions and ranges of annual unit costs to estimate the magnitude of financing needs.

To estimate the area (Q_{base}), the analysis uses the cumulative loss of tree cover recorded between 2001 and 2024 in the countries of Latin America and the Caribbean, based on the global forest change dataset developed by Hansen et al. (2013) and the Global Forest Watch platform (WRI, 2025). For each country, tree cover loss during this period is identified and an aggregate regional value is constructed, interpreted as an order-of-magnitude estimate of the areas in which forest structure has been altered and that could require restoration measures. Tree cover gain is not deducted, as it may correspond to commercial plantations, forest rotations, or other land-use changes that do not necessarily constitute ecological restoration of native forests.

To calculate the restoration unit cost (C), the exercise draws on the study by Vergara et al. (2016). This study reports total costs per hectare for three restoration methods—restoration plantings, assisted natural regeneration of forests, and agroforestry systems—and for three degrees of degradation—slight, moderate, and severe. For each degree of degradation, the simple average of the costs of these approaches is calculated, based on the assumption that, at the landscape level, different restoration methods coexist and are combined. Accordingly, the lower bound of the range (C_{min}) is associated with contexts of slight degradation, while the upper bound (C_{max}) is associated with contexts of severe degradation. Both bounds are derived from the total costs per hectare reported in the study.

Because the reference figures correspond to total costs per hectare, the exercise expresses them in annual terms by annualizing them over a representative restoration horizon (T). In this estimate, $T = 20$ years is adopted as an operational assumption for annualizing the costs and obtaining a comparable annual equivalent, consistent with the medium- and long-term horizons commonly used in forest restoration plans and programs. This assumption does not imply that expenditures are distributed linearly over time, but rather provides an approximation of an average annual cost for the purposes of the regional estimate.

Results of the Estimation

The estimation of financing needs is based on the regional target restoration area, aligned with KM-GBF Target 2: $Q_{2030} = 0.30 \times Q_{base}$, corresponding to 38.13 million hectares by 2030. Using this Q and the operational range of annual restoration unit costs⁵⁰ defined in the methodological section, the financing needs for the region are estimated.

⁵⁰. All costs and monetary amounts for this component are adjusted to 2025 prices; for further reference, see Table 3.

For C_{min}, an annual unit cost of US\$ 40/ha/year is adopted, consistent with the lower bound of the operational range used for restoration and associated with contexts of slight degradation. For C_{max}, an annual unit cost of US\$ 158/ha/year is adopted, consistent with the upper bound of the operational range and associated with contexts of severe degradation.

Accordingly, applying annual restoration unit costs ranging from US\$ 40 to US\$ 158/ha/year to 38.13 million hectares, under an average four-year intervention cycle,⁵¹ results in a total cost of approximately US\$ 6.099 billion at the lower bound, associated with C_{min}, and approximately US\$ 24.090 billion at the upper bound, associated with C_{max}. The lower end of the range reflects a scenario in which lower-intensity interventions predominate in contexts of slight degradation, while the upper end approximates a scenario in which a larger proportion of degraded areas requires more demanding and costly interventions.

To achieve the 2030 restoration target, the annualized financing requirement for the 2026–2030 period falls within the following range:

- Lower bound: US\$ 1.220 billion per year.
- Upper bound: US\$ 4.818 billion per year.

This annual flow makes it possible to distribute the total intervention cost evenly, ensuring coverage of the prioritized forest area over a five-year period.

4.2.4.3 Restoration of Páramos

Páramos are high-mountain ecosystems found in the northern Andes, occurring only in Venezuela, Colombia, Ecuador, Peru, Costa Rica, and Panama. Although their extent is limited, they perform strategic ecological, hydrological, and climate-related functions. They are among the most biodiverse montane ecosystems and have some of the highest levels of endemism on the planet (Pérez-Moreno et al., 2016; TNC, 2025), harbor high rates of plant endemism, and connect montane zones, high-Andean forests, and tropical glaciers. They also regulate and store water in distinctive ways (Mosquera et al., 2023; Instituto de Hidrología, Meteorología y Estudios Ambientales, 2023), constitute the source of a large proportion of Andean river systems, and provide critical support for irrigation, drinking water supply, and hydropower

⁵¹ The 20-year horizon (T) and the four-year intervention cycle are complementary, rather than contradictory, parameters: the former annualizes the total per-hectare cost reported by Vergara et al. (2016), while the latter reflects the frequency of maintenance interventions within that horizon.

generation (Sarmiento et al., 2013). Their soils contain significant carbon stocks that, on a per-hectare basis, can exceed those of tropical rainforests (Hofstede et al., 2014), making them critical assets in the face of growing water and climate stress in the region.⁵²

Methodological Approach

As in the case of marine and coastal ecosystems, financing needs for páramo restoration are calculated using the expression $Q_{2030} \times C_{total}$, where Q_{2030} is the area to be restored and C_{total} corresponds to the annual unit restoration cost multiplied by the number of periods over which the intervention is required.

The estimated area of páramos in Latin America and the Caribbean varies significantly depending on the methodology, mapping scale, and definition used to delineate the ecosystem. Various regional estimates place the total area between 35,000 km² (3.5 million hectares) and 45,000 km² (4.5 million hectares) (Hofstede et al., 2014; Peyre et al., 2021; IUCN and World Commission on Protected Areas, n.d.). However, other studies based on land cover data for the northern Andes propose a more conservative figure of approximately 24,301 km² (Peyre et al., 2021). For the purposes of this study, and to reduce the uncertainty associated with the different delineation methodologies, the area (Q_{base}) is estimated using official figures published by national government entities for Colombia and Ecuador—the two countries that account for more than 80% of the region's páramo area—while consolidated estimates from the International Union for Conservation of Nature (IUCN) (Hofstede et al., 2014) are used for the other countries, given the absence of comparable official sources or their relatively small share of the regional total.

With regard to the loss rate, national estimates vary depending on the methodology and baseline used. At the regional level, one of the most comprehensive references for the Andean countries is Hofstede et al. (2014), who estimate that approximately one-third of the páramo ecosystem had been transformed or lost by the early 2000s (Hofstede et al., 2003, cited in Hofstede et al., 2014). In light of the trends documented in Colombia and Ecuador in subsequent years, this figure may be conservative for the current period. Nevertheless, given that the objective of this exercise is to establish a minimum baseline for estimating financing needs, 33% is adopted as the operational reference assumption.

⁵². These ecosystems are experiencing ongoing degradation. Extensive livestock farming, potato cultivation, burning, and agricultural expansion have affected at least one-third of the region's páramos, while more than half of the remaining area shows some degree of human intervention (Hofstede et al., 2014). This degradation threatens biodiversity and carbon storage and increases exposure to landslides, floods, and droughts in territories that depend on páramos for water regulation (Hofstede et al., 2003), thereby undermining water, food, and energy security in Andean countries.

For the calculation of the restoration unit cost (C), most of the studies identified—including projects financed by the Global Environment Facility (GEF) and led by the United Nations Development Programme (UNDP) in Colombia and Ecuador—report aggregate costs for high-mountain ecosystems in general—including native forests and shrublands, among other ecosystems—without specifically disaggregating the costs associated with páramos. For this reason, two Colombian experiences focused specifically on the restoration of these ecosystems are used: Resolution 001954 of the National Authority for Environmental Licenses (ANLA, 2024) and the project “Water-Centered Planning and Climate Adaptation in the Chingaza–Sumapaz–Guerrero–Guacheneque Landscape” of the Ministry of Environment and Sustainable Development (MADS) and the Central Region Special Administrative and Planning Region (RAP-E) (MADS, 2025).

Lastly, regarding the representative restoration horizon (T), this study takes as a reference the time estimated to recover hydrological functions, which requires a shorter intervention period than the recovery of vegetation structure or the original composition of biodiversity. Accordingly, the results of the analysis by Suárez et al. (2022), which identifies the time required for surface hydrological recovery in Andean peatlands in Ecuador, are used as a reference.

Results of the Estimation

To estimate the area to be restored, the analysis takes as its starting point the current distribution of páramos in the region, estimated at 4.58 million hectares, based on the sources mentioned in the previous section: 2.91 million hectares in Colombia (Sarmiento et al., 2013), 1.34 million hectares in Ecuador (Universidad Técnica Particular de Loja, 2023, cited in Ministerio de Educación del Ecuador, 2023), and a total of 0.34 million hectares in Venezuela, Peru, and Central America (Hofstede et al., 2014). Applying the 33% loss rate estimated by Hofstede et al. (2014), the historical baseline is estimated at 6.84 million hectares, implying a lost area of 2.26 million hectares (Q_base). Accordingly, the target restoration area (Q_2030), aligned with KM-GBF Target 2, corresponds to 30% of this lost area, equivalent to 0.68 million hectares.

The restoration unit cost was estimated based on two sources. For C_min, the annual páramo restoration cost reported by MADS and RAP-E (MADS, 2025), of US\$ 3,798/ha/year, is used. Multiplied by the minimum average hydrological recovery period of T = 3 years, this yields a total cost of US\$ 11,394/ha. For C_max, the total cost of US\$ 11,699/ha reported by ANLA (2024) is used, which integrates establishment and maintenance costs over the same period.

Applying these unit costs to the target area of 0.68 million hectares and distributing the total cost over the 2026–2030 implementation period, annualized financing needs fall within the following range:

- Lower bound: US\$ 1.541 billion per year.
- Upper bound: US\$ 1.582 billion per year.

Given the hydrological function of páramos as water providers for millions of people in the Andean countries, the investment required for their restoration can be understood not only as conservation spending, but also as a risk-reduction measure with high social and economic returns. Nevertheless, the limited availability of sources on costs specific to páramos outside Colombia and the adoption of a hydrological recovery horizon—shorter than that required to restore biodiversity or vegetation structure—suggest that the figures presented may underestimate actual financing needs, particularly in other territories.

4.2.4.4 Restoration of Peatlands

Peatlands are strategic ecosystems for climate regulation and biodiversity conservation because of their high capacity to store carbon and regulate water. Although they cover only around 3%–4% of the planet's land area, they store approximately twice as much carbon as all the world's forests combined, making them one of the largest terrestrial reservoirs of organic carbon. In Latin America and the Caribbean, they cover more than 63 million hectares—equivalent to 12.9% of the global total—distributed across the tropical lowlands of South America, Central America, and the Caribbean, the mountainous areas of the Andes and the Guiana Shield, and temperate Patagonia at the southern tip of the continent. In addition to their climate-related function, they contribute to water regulation and support highly specialized biodiversity (UNEP, 2022).⁵³

Methodological Approach

To estimate peatland restoration needs, the analysis starts from the area currently identified for Latin America and the Caribbean, equivalent to approximately 63 million hectares (UNEP, 2022). The estimated global rate of peatland loss and transformation since 1970 (13.8%) is then applied, derived from the comparison between the historical area of 580 million hectares and the current estimated global area of 500 million hectares (Convention on Wetlands, 2025).

To avoid double counting across restoration categories, the degraded regional area is reduced by the areas already included in previous categories of the analysis that ecologically form part of peatland ecosystems (UNEP, 2022): mangroves—associated with coastal peatlands—(0.12 million hectares) and degraded páramo areas (2.26 million hectares). The resulting net area constitutes the reference baseline (Q_base) on which the target restoration area for 2030 is calculated, equivalent to 30% of this baseline, in line with KM-GBF Target 2.

⁵³. Peatlands face growing pressures from agricultural expansion, drainage, and fires. Globally, approximately 14% of peatlands have been converted or lost since 1970, equivalent to 80 million hectares out of a historical total of 580 million hectares (Convention on Wetlands, 2025). Degraded peatlands cease to function as carbon sinks and can emit up to five times more greenhouse gases per hectare than intact peatlands (Convention on Wetlands, 2025).

To estimate the unit cost (C), the global average per hectare per year reported by the Convention on Wetlands (2025), adjusted to 2025 prices, is used. This value primarily reflects the costs associated with rewetting interventions, the most widespread practice in peatland restoration processes internationally. The average intervention horizon is set at $T = 1$ year, given that rewetting is a physically discrete intervention whose hydrological effects become apparent in the short term.

Results of the Estimation

The 13.8% loss rate corresponds to the proportion of the historical area lost at the global level and is therefore applied inversely: the current 63 million hectares represent 86.2% of the historical regional area (73.1 million hectares), resulting in a degraded area of 10.1 million hectares. After deducting the areas already accounted for in other categories of the analysis, the net Q_{base} amounts to 7.7 million hectares, of which the target restoration area for 2030 corresponds to 30%, equivalent to 2.31 million hectares. Applying the adjusted unit cost of US\$ 1,176/ha/year to this area results in total financing needs of approximately US\$ 2.7174 billion in 2025 prices. Distributing these financing needs over the 2026–2030 period yields the following estimate:

- Estimated value: US\$ 543.5 million per year.

Because the cost used corresponds exclusively to rewetting interventions—the lowest-cost alternative within the range of peatland restoration approaches—this estimate should be interpreted as a reference floor. Effective ecological restoration of a significant share of the region's degraded peatlands would require complementing these interventions with revegetation and other hydrological and ecological management measures, whose unit costs may be considerably higher (Kustina et al., 2025).

4.3 Terrestrial and Marine Protected Areas

At the global level, protected areas have become a proven mechanism for safeguarding habitats and species populations, as well as for providing important ecosystem services and multiple benefits to people (CBD, n.d.-b). The commitments adopted under the KM-GBF establish, in Target 3: “Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean...” (CBD, n.d.-b).

Methodological Approach

The methodology for estimating the financing needs of terrestrial and marine protected areas is based on the costs of achieving KM-GBF Target 3, which concerns the conservation of 30% of terrestrial and marine areas of importance for biodiversity.⁵⁴

The estimate considers two types of direct costs associated with expanding and managing protected and conserved areas across 26 countries in Latin America and the Caribbean: the costs of establishing new areas, which depend on governments' capacity to acquire properties and land, as well as on their prices; and the annual management and maintenance costs of new and existing protected areas. The costs of acquiring marine areas may be modest in budgetary terms and, in some cases, may even be nonexistent.

These costs depend on the availability of public budgets and resources to cover them effectively. Likewise, expanding protected and conserved areas entails opportunity costs arising from potential losses of income from conventional productive activities, such as agriculture and fisheries. These costs are estimated by Waldron et al. (2026), but are not considered in the present analysis. Only the establishment and management costs of protected areas in the region are included.

To estimate the costs of terrestrial protected areas, it is assumed that there will be no future expansion of protected areas beyond the agreed levels. Accordingly, in the biodiversity-priority scenario, it is assumed that these areas will expand to reach 30% of the total area. To this end, currently unprotected areas ("grid cells" in the economic models) with higher levels of biodiversity in each country are added, without considering economic impacts.⁵⁵ Conversely, in the economic-priority scenario, it is assumed that natural areas suitable for agricultural use—that is, for expansion of the agricultural frontier—cannot be protected. Once these areas are excluded, additional areas are incorporated into the countries' existing protected-area systems, following an order based on species diversity by biome and country, until the established 30% coverage is reached.

⁵⁴. As a regional reference, ECLAC (2024c) estimates that protected areas in Latin America and the Caribbean account for 22% of the global total: approximately 5 million km² are terrestrial areas (24.3% of the region's land area) and 5.6 million km² are marine and coastal areas (24.4% of the region's marine area). An additional 6 percentage points are therefore needed to reach the 30% target established under the KM-GBF. The estimate is based on Waldron et al. (2020), who calculate global annual costs of US\$ 103 billion to US\$ 291 billion to achieve the 30x30 target, including US\$ 67.6 billion for management and administration and between US\$ 35.5 billion and US\$ 224 billion for the inclusion of new areas. For the region, ECLAC (2024c) estimates costs of US\$ 1,032 to US\$ 6,510 per km² of additional area and US\$ 1,415 per km² for its management.

⁵⁵. A key assumption is that the additional 30% of protected area coverage is distributed across national biomes in proportion to the area occupied by each biome.

For the third scenario, representing a compromise between biodiversity and the economy, it is assumed that one-third of the total area of the countries will be allocated to agricultural expansion and therefore will not be protected. Once this area is deducted, additional areas (“grid cells”) are added to existing protected-area systems, following a priority order based on the biodiversity of each biome, until 30% is reached.

With regard to marine protected areas, the three scenarios likewise assume that there will be no future expansion beyond the 30% target. It is also assumed that existing protected areas that do not have a high level of protection fall into a medium-protection category and that areas with a high level of protection are effectively considered protected areas. In the biodiversity-priority scenario, conservation is strict and all areas are assigned a high level of protection, including those that currently do not have one. In the economic-priority scenario, a balance is assumed between fishing activity and conservation in coastal and high-seas areas. Half of the 30% of marine area is modeled with a high level of protection and the other half with a medium level. It is also assumed that existing protected areas maintain their current level of conservation and protection (Waldron et al., 2026).

In the third scenario, representing a compromise between biodiversity and fisheries, it is assumed that, in coastal areas, half of the additional protected area will have a high level of protection and the other half will be modeled with a medium level, while existing marine protected areas will retain their current level of protection. In high-seas areas, newly incorporated areas will be considered highly protected, with the exception of existing areas, which will maintain their current level of protection (Waldron et al., 2026).

Results of the Estimation

Based on the estimates by Waldron et al. (2026), the establishment and management costs of terrestrial and marine protected areas under the economic-priority scenario, considered the lower bound, amount to US\$ 10.260 billion, while those under the biodiversity-priority scenario, considered the upper bound, amount to US\$ 11.704 billion. Both values are lower than the estimates reported by ECLAC (2024c).

Accordingly, annual financing needs fall within the following range:

- Lower bound: US\$ 2.052 billion per year.
- Upper bound: US\$ 2.340 billion per year.

4.4 Urban and Peri-Urban Areas

This category comprises two complementary components: gray infrastructure associated with expanding coverage and rehabilitating urban water treatment infrastructure (Section 4.4.1), and green infrastructure linked to the protection and restoration of watersheds that supply water to cities (Section 4.4.2), as ecosystems that provide water resources.

4.4.1 Urban Water Treatment

As part of the estimation of measures aimed at reducing pollution of water sources in urban areas, investment costs associated with expanding drinking water and basic sanitation coverage and rehabilitating infrastructure were calculated. These investments constitute a fundamental component of the costs required to improve urban wastewater management and reduce pollutant loads discharged into rivers, streams, and other water bodies that supply or flow through cities.

Methodological Approach

As in the *Water Treatment in Rural Areas* category, this estimate is based on the methodology developed by Saravia Matus et al. (2023), which uses a unit-cost approach to calculate the investment needs required to achieve safely managed drinking water and sanitation services. For additional information on the methodological approach, see Section 4.2.3.1.

Results of the Estimation

Under the assumptions described above, the estimated value of investments associated with managing water pollution in urban areas amounts to US\$ 279.046 billion for expanding sanitation coverage and US\$ 71.862 billion for renewing and rehabilitating existing infrastructure, for a total of US\$ 350.908 billion. The annualized investment value, considering a 2050 horizon, is presented below.

- Estimated value: US\$ 14.036 billion per year.

4.4.2 Watershed Conservation Near Cities

Methodological Approach

To estimate the financing needs associated with micro-watersheds adjacent to urban and peri-urban areas, costs related to the restoration and protection of these ecosystems in cities in Ecuador and Colombia were identified. In particular, Yaguache (2017) provides a detailed estimate of the costs required to implement conservation, restoration, and sustainable management actions for water sources and recharge areas in Ecuador.⁵⁶

As a first reference, the case of Ecuador was considered by reviewing the costs of restoring areas of water-related importance (C) over a five-year horizon. These costs include, first, the recovery of forest cover in areas important for moisture interception—upper montane forest edges (*ceja de montaña*) and fog-prone areas—as well as the recovery of water sources and water recharge areas. The cost of these measures amounts to US\$ 1,284.6 per hectare. Costs associated with riparian buffer strips in micro-watersheds are estimated at US\$ 19.6 per hectare, while the establishment of vegetative strips is valued at approximately US\$ 32 per hectare. Finally, the cost of revegetating degraded areas amounts to US\$ 923.6 per hectare. The sum of these costs amounts to US\$ 2,223.8 per hectare in 2017 prices, equivalent to US\$ 2,996 per hectare in 2025 prices.

For illustrative purposes, and to identify the needs in terms of hectares (Q) that must be protected to preserve the watersheds supplying the city of Quito, the study by Navalkha et al. (2022) for the Lincoln Institute of Land Policy is used as a reference. The article notes that Ecuador's Water Protection Fund (FONAG) has identified 236,600 hectares in the Quito watershed as priority areas, of which 81,500 hectares are located within protected areas. Accordingly, the watershed area that must be preserved and protected to ensure the provision of ecosystem services to the city of Quito amounts to 155,100 hectares (Q).

On this basis, the lower bound for watershed protection is assumed to be the product of the updated per-hectare costs of restoring areas important for moisture interception and water sources (US\$ 2,086/ha) and the priority area for watershed preservation in the city of Quito (155,100 ha). Thus, financing needs at the lower bound amount to approximately US\$ 323.5 million, equivalent to US\$ 12.9 million per year, while the upper bound amounts to US\$ 464.6 million, equivalent to US\$ 18.5 million per year.

⁵⁶ The study establishes local and national measures, including the protection of remaining ecosystems, forest restoration, agro-ecological practices, soil management, support for protected areas, interinstitutional coordination, financing mechanisms, and monitoring. The costs of watershed conservation strategies include farm- and micro-watershed-level planning, with specific measures, costs per hectare and per km², and extension activities.

Another reference case is Bogotá. Based on the work of Izquierdo-Tort et al. (2023) for the World Resources Institute (WRI), which focuses on structuring innovative solutions to address the water supply and recharge needs of Colombia's capital, the costs of protecting and restoring (C) approximately 2,460 hectares (Q) in the upper Bogotá River watershed—equivalent to 2% of its area—are identified, with the aim of “ensuring reliable and clean water sources” to “supply a growing urban population.” In this regard, WRI proposes investments in activities such as sustainable silvopastoral systems, restoration nuclei in strategic ecosystems, and protection of springs in these ecosystems. The costs per hectare of these activities amount to US\$ 2,133 for silvopastoral systems, US\$ 3,902 for ecosystem restoration, and US\$ 2,469 for water-spring protection.

Results of the Estimation

These cases provide the reference framework for estimating regional financing needs aimed at protecting watersheds in urban and peri-urban areas. In this context, Cole et al. (2024) present estimates of forest restoration costs for 14 countries in Latin America and the Caribbean,⁵⁷ considering the restoration of strategic ecosystems as a strategy to curb biodiversity loss and reduce the effects of climate change.

The average ecosystem reforestation cost across the 14 countries in the region amounts to US\$ 7,448.8 per hectare per year. These costs include the tree seeds to be used (US\$ 3.1 per seed), land preparation (US\$ 1,431.3 per hectare), planting (US\$ 1,883 per hectare), short- and long-term management—over a 10-year period—(US\$ 2,839.6 per hectare per year), and monitoring (US\$ 1,291.6/ha/year). In addition, The Nature Conservancy (TNC) and the IDB indicated in 2011 that, through the Latin American Water Funds Partnership, the region needed to invest in the conservation of approximately 7 million acres (3 million hectares) of watersheds to benefit nearly 50 million people in urban and rural areas.

Because these estimates are not recent, a calculation was performed to estimate the watershed conservation area required in urban areas across the region. For this purpose, a total population of 650 million people in Latin America and the Caribbean in 2025 is used as the reference. Of this total, it is assumed that 80% live in urban areas, equivalent to 520 million people. In turn, approximately 60% of the region's urban population resides in cities with more than 300,000 inhabitants, equivalent to approximately 312 million people. Given that TNC and IDB (2011) indicate that conserving 3 million hectares of watersheds can benefit 50 million people, a conversion factor of 0.06 hectares of conserved watershed per person is applied. Applying this factor to approximately 312 million inhabitants yields a required area of approximately 18.7

⁵⁷ The countries are Mexico, the Dominican Republic, Guatemala, El Salvador, Costa Rica, Panama, Colombia, Ecuador, Peru, Brazil, Bolivia, Chile, Argentina, and Paraguay.

million hectares. This area is then multiplied by two, using an adjustment parameter intended to account for the pressures affecting these ecosystems as a result of urbanization, degradation, and extreme climate events. Accordingly, the watershed area that should be conserved to supply cities with populations of more than 300,000 inhabitants would amount to approximately 37.4 million hectares.

To estimate the lower bound of financing needs, the average costs of protecting water springs in strategic ecosystems (US\$ 2,041.2 per hectare) are considered. Accordingly, the investment required under this scenario amounts to approximately US\$ 76.4225 billion, equivalent to US\$ 3.0569 billion per year. The upper bound, in turn, includes the average costs of establishing forest cover, agrosilvopastoral systems, and preparing land for planting, which amount to US\$ 5,517.3 per hectare. Consequently, the estimated investment under this scenario is US\$ 206.5702 billion, equivalent to US\$ 8.2628 billion per year.

- Lower bound: US\$ 3.0569 billion per year.
- Upper bound: US\$ 8.2628 billion per year.

Summary of Financing Needs

Based on the aggregation of the components developed in Sections 4.1 to 4.4, Table 4 consolidates the total estimated financing needs for the region.

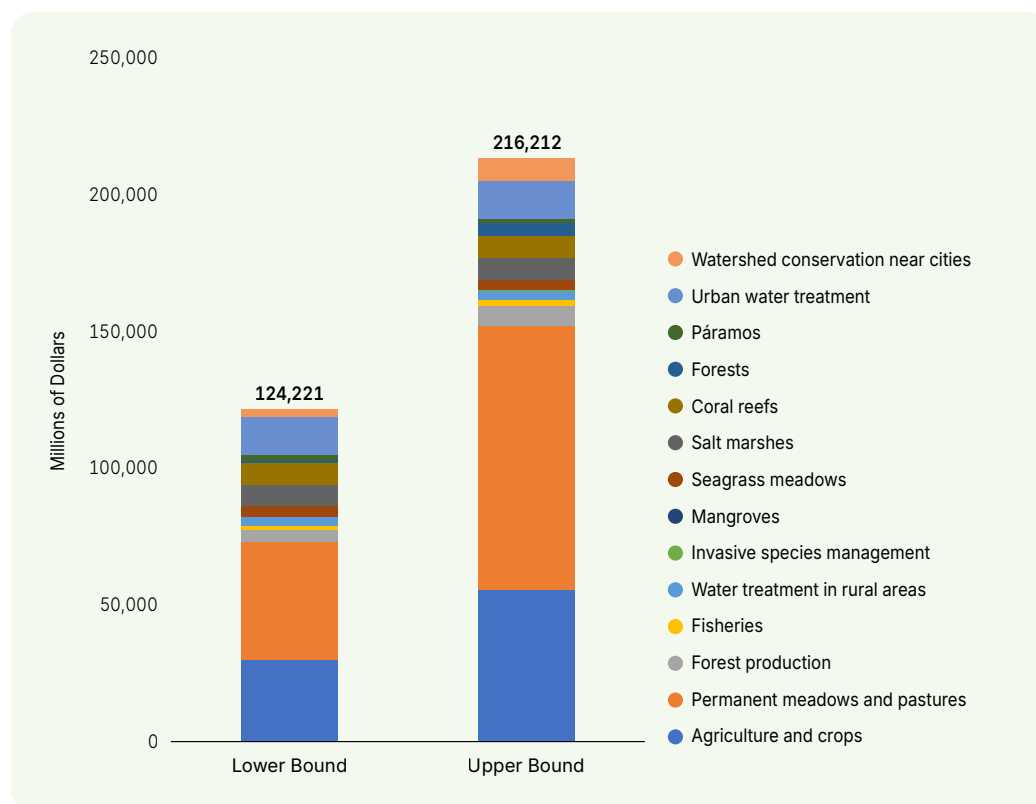
TABLE 4

Total Financing Needs as of 2025 (Millions of 2025 dollars)

CATEGORY			LOWER BOUND	UPPER BOUND
Managed production landscapes	Agriculture and crops		29,750	55,285
	Permanent meadows and pastures		42,990	96,526
	Forest production		4,412	7,334
Production landscapes based on wild resources	Fisheries		1,434	2,241
Pressures on biodiversity in terrestrial and marine landscapes	Water treatment in rural areas		3,410	
	Invasive species management		57	
Restoration of priority ecosystems	Marine and coastal ecosystems	Mangroves	90	147
		Seagrass meadows	3,749	
		Salt marshes	8,254	
		Coral reefs	7,626	
	Forests		1,220	4,818
	Páramos		1,541	1,582
	Peatlands		543	
Terrestrial and marine protected areas			2,052	2,341
Urban and peri-urban areas	Urban water treatment		14,036	
	Watershed conservation near cities		3,056.9	8,262.8
TOTAL			124,221	216,212
AVERAGE VALUE			170,217	

Source: Economic Commission for Latin America and the Caribbean.

FIGURE 8
Current Biodiversity Financing Needs in Latin America and the Caribbean, 2025



Source: Economic Commission for Latin America and the Caribbean.

Figure 8 shows that the costs associated with transitioning agriculture and livestock production toward more sustainable activities aimed at protecting and restoring natural capital account for 58.9% of the region's biodiversity financing needs. This proportion rises to 67.2% when urban water treatment costs are included.

Calculation of Financing Flows Aimed at Promoting Biodiversity Conservation and Protection

5



The estimation of current financial flows for biodiversity in Latin America and the Caribbean is expressed in constant 2025 U.S. dollars. Although considerable effort is made to identify the amount of financing actually allocated to biodiversity, gaps remain in the reporting of information, as many environmental expenditures are not clearly classified. Likewise, the data and figures examined often come from different sources—public, private, and international—and are based on different methodologies, which may make direct comparisons difficult. In addition, information on private financing is limited, meaning that its contribution may be underestimated in these calculations.⁵⁸

Public budgets have been the main sources of financing for biodiversity conservation and restoration. In 2019, at the global level, approximately 57% of biodiversity financing came from public expenditure (between US\$ 75 billion and US\$ 78 billion), 20% originated from public-private sources for natural infrastructure⁵⁹ (US\$ 27 billion), 6% came from biodiversity offsets (between US\$ 6 billion and US\$ 9 billion), and 5% from official development assistance⁶⁰ (between US\$ 4 billion and US\$ 10 billion) (Deutz et al., 2020). Estimates for 2024 that update the figures reported by Deutz et al. (2020) indicate that between 2019 and 2024, public expenditure on biodiversity remained unchanged in relative terms, while official development assistance increased to US\$ 15 billion. In this context, available financial flows in 2024 amounted to US\$ 208 billion, according to estimates by the Paulson Institute (2025).

⁵⁸. The estimates were calculated using ranges: a lower bound, primarily associated with resources allocated to biodiversity, and an upper bound that includes broader environmental financing. The most up-to-date available sources were used, recognizing differences in the time periods covered by the various databases. To avoid double counting, public expenditure and private financing categories were adjusted by deducting overlapping amounts related to natural infrastructure, green bonds, biodiversity offsets, and corporate investments financed through green debt. Although these adjustments improve consistency, risks of double counting remain due to limitations in data availability and traceability. The figures should therefore be viewed as an approximation of financial flows allocated to biodiversity conservation and sustainable use, rather than as an exact measurement.

⁵⁹. Refers to ecosystems such as forests, wetlands, and bodies of water, among others, that provide ecosystem services to people. This definition also encompasses human-modified systems, such as green roofs, naturalized ponds for wastewater treatment, and other nature-based solutions.

⁶⁰. Refers to assistance provided by governments and aimed at promoting economic development and wellbeing in less-developed countries.

5.1 Current Public and Private Capital Flows, Domestic and International, Directed Toward Biodiversity

The estimation of current biodiversity financing flows in Latin America and the Caribbean indicates that, in 2025, the region mobilized between US\$ 5.381 billion and US\$ 29.080 billion in constant 2025 prices (see Table 5). Within this range, the lower bound (US\$ 5.381 billion) represents flows primarily directed toward biodiversity, while the upper bound (US\$ 29.080 billion) represents a broader category that includes both biodiversity- and environment-related flows.⁶¹ Public sources, both domestic and international, account for between US\$ 1.015 billion and US\$ 15.885 billion, equivalent to between 18.87% and 54.5% of total flows. At the lower bound, these resources consist primarily of public budgets and domestic fiscal policy (US\$ 630.4 million), supplemented by international financing through bilateral official development assistance (ODA) (US\$ 342.9 million), multilateral ODA (US\$ 32.4 million), and other official flows (US\$ 9.3 million). At the upper bound, public financing is concentrated primarily in government budgets (US\$ 14.672 billion), while ODA accounts for approximately 4.07% of the total.

Public-private mechanisms mobilize between US\$ 1.512 billion and US\$ 7.958 billion, accounting for 28.1% and 27.37% of total financing at the lower and upper bounds, respectively. These mechanisms include instruments such as green bonds and green debt (between US\$ 1.092 billion and US\$ 7.518 billion), as well as resources from natural infrastructure (US\$ 92.2 million), NbS⁶² and carbon markets (US\$ 99.3 million), and biodiversity offset mechanisms (US\$ 101.2 million), which report the same financial flows at both bounds. Finally, philanthropy and conservation NGOs contribute between US\$ 127.2 million and US\$ 148 million. Private financing, in turn, ranges from US\$ 2.854 billion at the lower bound to US\$ 5.267 billion at the upper bound, with significant contributions from investments in sustainable value chains (between US\$ 20.3 million and US\$ 1.044 billion) and private-sector green financial products (between US\$ 2.834 billion and US\$ 4.223 billion).

⁶¹. The difference between the two bounds is explained in detail for each of the categories used to estimate current financing flows, presented below.

⁶². Natural infrastructure and NbS may overlap, creating a risk of double counting when they are estimated separately. To avoid this, the study classifies as natural infrastructure investments that, based on the financial instrument and its objective, are aimed at conserving, restoring, or managing ecosystems that perform functions associated with physical infrastructure, such as water regulation, flood control, or coastal protection, through watershed management programs, water funds, or payments for environmental services (PES). For example, more than 45 watershed investment programs in the region were identified and classified as natural infrastructure.

Although these estimates represent the most comprehensive approximation currently available for the region,⁶³ it is important to consider that the figures may be subject to data limitations and potential overlaps between categories. Therefore, they should be interpreted as orders of magnitude of the financing available for biodiversity conservation, restoration, and sustainable use.

TABLE 5
Current Biodiversity Financing Flows in Latin America and the Caribbean
(Millions of dollars)⁶⁴

FLOWS		LOWER BOUND	%	UPPER BOUND	%
1. DOMESTIC AND INTERNATIONAL PUBLIC FLOWS					
Public budgets and domestic fiscal policy (domestic public expenditure)		630.4	11.7%	14,672	50.4%
Official international financing	Bilateral ODA	343	6.4%	825	2.8%
	Multilateral ODA	32	0.6%	151	0.5%
	Other official flows (OOF)	9	0.2%	207	0.7%
SUBTOTAL		1,015	18.8%	15,885	54.5%
2. DOMESTIC AND INTERNATIONAL PUBLIC-PRIVATE FLOWS					
Natural infrastructure		92	1.7%	92	0.3%
Nature-based solutions and carbon markets		99	1.8%	99	0.3%
Biodiversity initiatives financed through green debt (green bonds)		1,092	20.3%	7,518	25.8%
Biodiversity offsets		101	1.9%	101	0.3%
Philanthropy, foundations, and conservation NGOs		127	2.4%	148	0.5%
SUBTOTAL		1,512	28.1%	7,958	27.4%

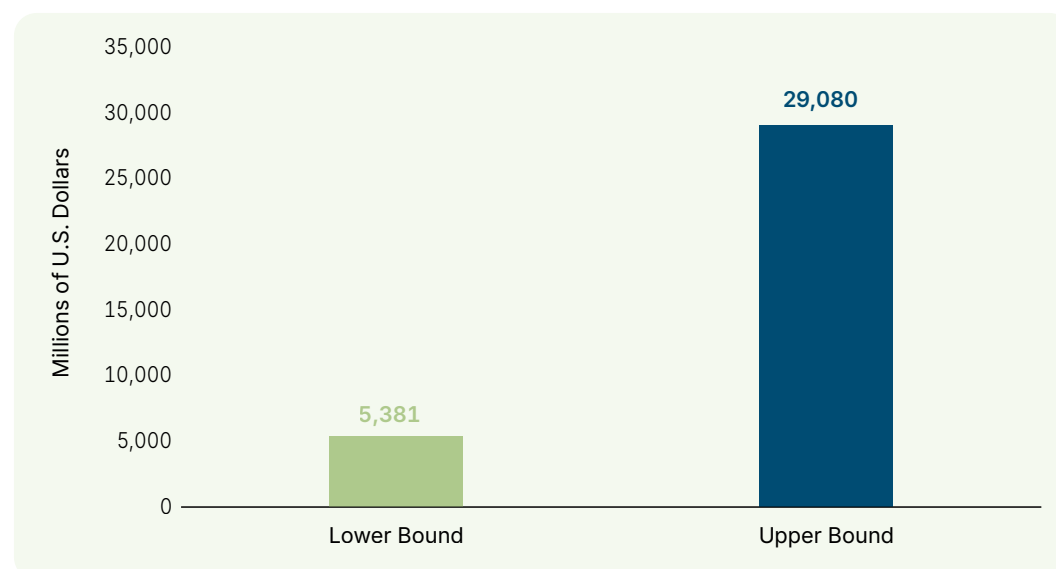
⁶³. It should be noted that, at the subregional level, data were not available for all the categories analyzed in this document. Therefore, it was not possible to develop a more disaggregated estimate. The same applies at the subnational level, where no consolidated data are available to support a precise estimate.

⁶⁴. These estimates are expressed in constant 2025 U.S. dollars by applying a deflator based on information from the World Bank.

FLOWS	LOWER BOUND	%	UPPER BOUND	%
3. PRIVATE FINANCING				
Sustainable value chains	20.3	0.4%	1,044	3.6%
Private investment in biodiversity financed through green debt	2,834	52.7%	4,223	14.6%
SUBTOTAL	2,854	53.0%	5,267	18.1%
TOTAL	5,381	100%	29,080	100%

Source: Economic Commission for Latin America and the Caribbean, based on *Capital flows to Latin America and the Caribbean: 2024 year-in-review and early 2025 developments* (LC/WAS/TS.2025/2) (2025a), <https://repositorio.cepal.org/handle/11362/81550>; CEPALSTAT: Statistical databases and publications [Database] (2026b), <https://statistics.cepal.org/portal/cepalstat/>; Organisation for Economic Co-operation and Development. (n.d.). *OECD Data Explorer* [Database]. <https://data-explorer.oecd.org/>; Bennett, G., and Ruef, F. (2016). *Alliances for green infrastructure: State of watershed investment 2016*. Forest Trends' Ecosystem Marketplace. <https://www.forest-trends.org/publications/alliances-for-green-infrastructure/>; Hamrick, K., and Gallant, M. (2017). *Fertile ground: State of forest carbon finance 2017*. Forest Trends' Ecosystem Marketplace. <https://www.forest-trends.org/publications/fertile-ground/>; and Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobin-de la Puente, J. (2020). *Financing nature: Closing the global biodiversity financing gap*. Paulson Institute; The Nature Conservancy; Cornell Atkinson Center for Sustainability. <https://www.paulsoninstitute.org/conservation/financing-nature-report/>.

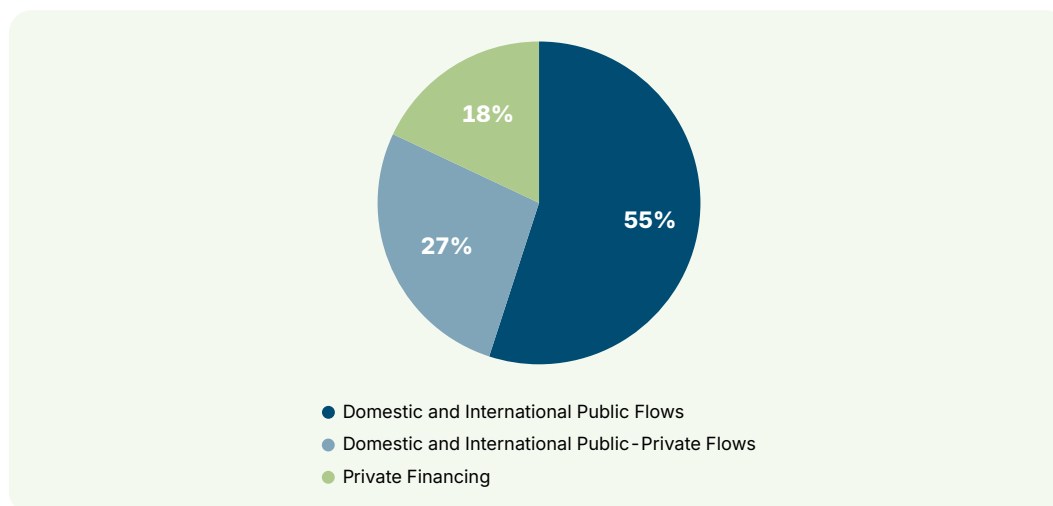
FIGURE 9
Current Biodiversity Financing Flows in Latin America and the Caribbean (Lower and upper bounds)



Source: Economic Commission for Latin America and the Caribbean.

FIGURE 10

Percentage Share of Current Financing Flows, by Source of Funds (Upper bound)



Source: Economic Commission for Latin America and the Caribbean.

As illustrated in Figure 10, domestic and international public flows predominate (55%) in financing the sustainable use and protection of biodiversity in the region, followed by public-private flows (27%) and private resources (18%). This financing composition does not necessarily coincide with that observed at the global level, except for the high share of public expenditure.

5.1.1 Domestic and International Public Flows

Domestic and international public flows comprise resources allocated to biodiversity that are mobilized by governments and official international cooperation. Their estimation is organized into public budgets and domestic fiscal policy, and official international financing—the latter disaggregated into bilateral official development assistance (ODA), multilateral ODA, and other official flows (OOF).

5.1.1.1 Public Budgets and Domestic Fiscal Policy (Domestic Public Expenditure)

The estimation of domestic public expenditure on biodiversity in Latin America and the Caribbean was based on the “Public Expenditure by Function” database of CEPALSTAT,⁶⁵ considered the most consistent fiscal data source for the region. The analysis covers the 2000–2020 period and includes information from 27 countries—10 in South America, 7 in Central America,⁶⁶ and 10 in the Caribbean. Based on the functional categories of environmental expenditure reported by CEPALSTAT, “protection of biodiversity and landscape” was identified as the category most directly linked to biodiversity financing and was therefore used to estimate the lower bound of public expenditure. For the upper bound, the other environmental expenditure categories—environmental protection, wastewater management, research and development related to environmental protection, and pollution abatement—were included, with the exception of waste management.⁶⁷

To estimate both bounds, the amount of domestic public expenditure corresponding to 2019 was used, which is considered in this study to be the most recent available flow.⁶⁸ This resulted in a range of US\$ 1.912 billion (lower bound) to US\$ 21.596 billion (upper bound).⁶⁹ This range is adjusted by deducting flows with a high risk of double counting with public expenditure. The resulting lower and upper bounds are as follows:

- Lower bound: US\$ 630,364,617 per year.
- Upper bound: US\$ 14,672,225,552 per year.

⁶⁵. The original data, reported in current local currency, were converted to current U.S. dollars using the official exchange rate and adjusted for inflation to constant 2025 U.S. dollars, ensuring comparability across countries and over time.

⁶⁶. Including Mexico.

⁶⁷. The waste management category was excluded from the estimate of public expenditure on biodiversity and the environment because it focuses on waste management, treatment, and disposal, without a specific emphasis on sustainable management. Although it may generate indirect environmental benefits, its contribution to biodiversity and environmental conservation, restoration, and sustainable use is not considered sufficiently direct to justify its inclusion. Furthermore, it includes activities with potentially negative impacts, such as waste disposal through dumping at sea, as outlined in the methodological guide *Measuring general government environmental protection expenditure* (ECLAC, 2015).

⁶⁸. This is because the estimated amount of domestic public expenditure for 2020 was considered an outlier.

⁶⁹. The difference between the two bounds is explained by the inclusion, in the upper bound, of categories related to environmental protection in general. The category contributing the most to this bound is “Environmental protection n.e.c. (not elsewhere classified),” which in 2019 accounted for approximately 69% of the total amount. This category includes environmental administration and policy formulation activities, multisectoral programs, and environmental education and monitoring. Of the other categories included, “wastewater management” accounts for approximately 19.8%; “protection of biodiversity and landscape,” approximately 8.9%; “pollution abatement,” approximately 1.7%; and “research and development related to environmental protection,” approximately 0.63% of the total amount (US\$ 21.596 billion).

5.1.1.2 Official International Financing

International public financing flows for biodiversity in Latin America and the Caribbean are estimated using the OECD's Creditor Reporting System (CRS) database, which consolidates disbursements of official development assistance (ODA) and other official flows (OOF) reported by Development Assistance Committee (DAC) countries and multilateral organizations. According to International Monetary Fund and OECD definitions, ODA refers to concessional official financing aimed at promoting the economic development and wellbeing of developing countries, while OOF comprises official transactions that do not meet these criteria, either because development is not their primary objective or because they have a grant element of less than 25%.

For this study, the CRS Biodiversity (41030) and General Environment Protection (410) sector codes were used. For the lower bound, only projects in which biodiversity is an explicit objective were considered, while the upper bound includes projects related to the environment in general, providing a conservative approximation of international flows directed toward the region. Disbursements to Central America and the Caribbean and South America during the 2019–2023 period were selected. These were originally expressed in constant 2023 U.S. dollars and subsequently updated to constant 2025 U.S. dollars using a deflator. Based on this dataset, the different components of international public financing are estimated: bilateral ODA, multilateral ODA, and other official flows.

Bilateral Official Development Assistance (ODA)

The estimation of bilateral official development assistance (ODA) for biodiversity in Latin America and the Caribbean is based on disbursements reported in the OECD's Creditor Reporting System (CRS) by donor countries of the Development Assistance Committee (DAC) to Central America and the Caribbean and South America. For the lower bound, only projects classified under the Biodiversity (41030) sector were considered, while the upper bound includes the broader General Environment Protection (410) sector. Based on data for the 2019–2023 period, expressed in constant 2023 U.S. dollars, the average disbursements for 2021–2023 were calculated as an approximation of the most recent annual flow and subsequently updated to constant 2025 U.S. dollars using a price deflator.

The results show that only 17 of the 32 Development Assistance Committee (DAC) countries report bilateral ODA disbursements for biodiversity in the region, highlighting the high concentration of international financial flows. In particular, Germany and the United States stand out as the main donors, accounting in 2023 for 81.9% of aid allocated to the Caribbean and 77.2% of aid allocated to South America. The estimated range is as follows:

- Lower bound: US\$ 342,974,506 per year.
- Upper bound: US\$ 825,168,148 per year.

The upper bound includes broader environmental protection activities, such as environmental policy management, biosphere protection, the preservation of natural sites, environmental education, and research.⁷⁰

Multilateral Official Development Assistance (ODA)

Multilateral official development assistance (ODA) for biodiversity in Latin America and the Caribbean was estimated based on disbursements reported by multilateral organizations in the OECD's Creditor Reporting System (CRS). For the lower bound, only projects classified under the Biodiversity (41030) sector were considered, while the upper bound includes the broader General Environment Protection (410) sector. Disbursements to Central America and the Caribbean and South America during the 2019–2023 period were considered. Based on this series, expressed in constant 2023 U.S. dollars, the average disbursements for 2021–2023 were calculated and subsequently updated to constant 2025 U.S. dollars.

The results show that only eight multilateral organizations report ODA disbursements for biodiversity in the region, highlighting the high institutional concentration of multilateral financing. In particular, European Union institutions and the Global Environment Facility (GEF) account for the largest share of these resources. The estimated annual flow of multilateral ODA for biodiversity in Latin America and the Caribbean falls within the following range, representing the best available approximation of recent multilateral financing for the region.

- Lower bound: US\$ 32,448,627 per year.
- Upper bound: US\$ 150,575,903 per year.

Other Official Flows (OOF)

Other official flows (OOF) for biodiversity in the region were estimated using the OECD's Creditor Reporting System (CRS), by selecting the Other Official Flows (non Export Credit) category, which comprises official transactions that do not qualify as official development assistance (ODA). As with the previous estimates, the lower bound is calculated using the Biodiversity (41030) sector, while the upper bound incorporates the broader General Environment Protection

⁷⁰. These activities correspond to the highest level of disaggregation available for the General Environment Protection (410) category in the OECD's Creditor Reporting System.

(410) sector. Disbursements to Central America and the Caribbean and South America during the 2014–2023 period were considered, originally expressed in constant 2023 U.S. dollars and subsequently updated to constant 2025 U.S. dollars.⁷¹

- Lower bound: US\$ 9,387,657 per year.
- Upper bound: US\$ 207,085,878 per year.

5.1.2 Domestic and International Public-Private Sources

Domestic and international public-private sources comprise resources allocated to biodiversity and mobilized through mechanisms that combine public and private financing. Their estimation is organized into natural infrastructure, NbS and carbon markets, green debt, biodiversity offsets, and philanthropy, foundations, and conservation NGOs.

5.1.2.1 Natural Infrastructure⁷²

Public-private financing flows for natural infrastructure in Latin America and the Caribbean were estimated based on the report *State of Watershed Investment 2016*, prepared by Bennett and Ruef (2016), which documents watershed investment programs and green infrastructure schemes. For the region, 47 operational watershed investment programs were identified, with an annual transaction value of US\$ 65.9 million in 2015. These programs include various instruments, such as payments for environmental services, water funds, user-funded programs, regulatory mechanisms, and public subsidies for watershed protection, involving the joint participation of governments, businesses, and other private stakeholders.

The original amounts, expressed in 2015 U.S. dollars, were updated to constant 2025 U.S. dollars to ensure comparability with the other components of financing flows. Likewise, in the absence of more recent regional time series, it is assumed that the observed investment pattern provides a reasonable approximation of the order of magnitude of current annual flows. It should

⁷¹. Due to the limited availability and fragmentation of data for this component in the OECD's Creditor Reporting System (CRS), including gaps and outliers in the series, a z-score adjusted using the median and median absolute deviation (MAD) is applied to reduce distortions. To estimate the lower and upper bounds, the average of the resulting annual amounts is calculated for 2014–2023, excluding years with outliers or missing data. Biodiversity-related other official flows (OOF) allocated to the region are estimated at between US\$ 9.39 million and US\$ 207.08 million per year, in constant 2025 dollars. The data show a high degree of concentration: among DAC countries, only Austria reports disbursements in this category, while among multilateral organizations, the IDB is the sole contributor. The wide range may reflect differences in donors' investment priorities across the sectors covered by the General Environment Protection (410) category.

⁷². This component refers to investment in natural infrastructure from public-private sources.

be noted that, within the estimate for this component, US\$ 88.7 million in public investment in green infrastructure was identified and deducted from domestic public flows to mitigate the risk of double counting.

- Lower bound: US\$ 92,217,532 per year.
- Upper bound: US\$ 92,217,532 per year.

5.1.2.2 Nature-Based Solutions and Carbon Markets

The NbS and carbon markets component for Latin America and the Caribbean is estimated based on State of the Voluntary Carbon Market 2025, published by Ecosystem Marketplace (Forest Trends' Ecosystem Marketplace, 2025). Carbon transactions are predominantly associated with forest and land-use projects that can be classified as NbS and represent a relevant category in the region. The analysis includes REDD+, improved forest management (IFM), afforestation, reforestation, and revegetation (ARR), agroforestry, and blue carbon projects, all of which can be classified as NbS with direct biodiversity benefits. To a lesser extent, the region also generates credits under the *Agriculture* category—livestock farming and soil management—which is also relevant to biodiversity.

It should be noted that the voluntary carbon market figures reported by Ecosystem Marketplace represent a lower bound of the actual market, given that participation in the reporting system is voluntary and a significant number of actors do not report their transactions. Therefore, the actual volume of credits transacted in the region is likely higher than that reported here. This same value is adopted as the upper bound, given the limited availability of recent information. It should also be recognized that the value of transactions does not equal the net flow received by projects, as it includes intermediary margins, certification and verification costs, and other transaction costs. The transactions recorded by Ecosystem Marketplace include payments from companies, NGOs, intermediaries, and, potentially, public resources channeled through carbon programs or funds. Consequently, this component is classified as a public-private source, recognizing that there may be partial double counting with other public financing categories already accounted for in this study.

- Lower bound: US\$ 99,284,400 per year.
- Upper bound: US\$ 99,284,400 per year.

5.1.2.3 Biodiversity Initiatives Financed Through Green Debt (Green Bonds)

The component of green financial products linked to biodiversity was estimated based on sustainable bond issuances (GSSS: green, social, sustainability, and sustainability-linked) by issuers from Latin America and the Caribbean in international markets during 2024, using the ECLAC (2025a) study on capital flows to the region as a source. Based on a microdata set constructed using information from specialized platforms such as Bloomberg, Dealogic, LatinFinance, and Cbonds, a “bottom-up” approach was applied by reviewing the documentation for each bond to identify only those instruments whose use of proceeds was directly linked to biodiversity conservation, ecosystem protection, or sustainable natural resource management.

After applying these criteria—including explicit references to biodiversity categories or to SDGs 14 and 15, while excluding bonds intended exclusively for clean energy, transportation, or environmental infrastructure without a direct link to biodiversity—a limited subset of bonds with direct contributions to this objective was identified. To estimate the public-private financing component, only sovereign issuances were considered, totaling US\$ 1.092 billion in 2024, which is adopted as the lower bound of annual financing associated with green debt for biodiversity in the region. Under an expanded scenario, the amount could reach US\$ 7.517 billion. These figures were subsequently adjusted to constant 2025 prices to ensure comparability with the other financing flows analyzed.

- Lower bound: US\$ 1,092,125,643 per year.
- Upper bound: US\$ 7,517,681,330 per year.

5.1.2.4 Biodiversity Offsets

The information available on biodiversity offsets is limited at both the global and regional levels. Although approximately 42 countries have regulatory frameworks requiring biodiversity offsets, only a fraction of them have programs that have actually been implemented, and even fewer have quantitative estimates of expenditures. Deutz et al. (2020) estimate that global financing associated with regulatory offsets ranged from US\$ 6.3 billion to US\$ 9.2 billion annually in 2019, with empirical evidence concentrated primarily in Australia, Brazil, Germany, Mexico, and the United States.

For Latin America and the Caribbean, the estimate is based on documented cases in Brazil and Mexico, given the absence of systematic information for other countries in the region. In Brazil, various regulatory frameworks—including the National System of Conservation Units Law, the Forest Code, and the Atlantic Forest Law—have generated resources for conservation. For example, the Brazilian Biodiversity Fund (FUNBIO) reported financing for conservation

mechanisms amounting to 114 million reais, equivalent to a total of US\$ 28.2 million or an annual average of US\$ 4 million. In Mexico, the program administered by CONAFOR allocated US\$ 489 million between 2003 and 2011, with an annual average of US\$ 61 million (Deutz et al., 2020). After adjusting these values to constant 2025 dollars, the annual flow of biodiversity offsets in the region is estimated at approximately US\$ 101.2 million. This figure should be interpreted as a lower-bound estimate, as it excludes programs in other countries and voluntary or corporate schemes.

- Lower bound: US\$ 101,156,600 per year.
- Upper bound: US\$ 101,156,600 per year.

5.1.2.5 Philanthropy, Foundations, and Conservation NGOs

The philanthropy, foundations, and conservation NGOs component is estimated based on financing flows from international private donors, using the OECD's *Creditor Reporting System* (CRS) database. For this study, disbursements directed to Latin America and the Caribbean under the *Biodiversity* (41030) sector during the 2019–2023 period were analyzed, considering donors classified as *Private Donors*. The most recent annual flow is approximated using the average of disbursements for 2021–2023, originally expressed in constant 2023 U.S. dollars and subsequently updated to constant 2025 U.S. dollars.

Based on this methodology, estimated annual financing from philanthropic foundations and private funds ranges from US\$ 127.2 million to US\$ 147.9 million. In total, the database includes 42 international philanthropic organizations, of which 17 report financing specifically for biodiversity in the region, indicating a high concentration of flows. However, this estimate should be interpreted as a minimum value, as it includes only resources reported in the CRS and does not include the revenues of major conservation NGOs or other private cofinancing mechanisms mobilized by international institutions such as the GEF.

- Lower bound: US\$ 127,244,643 per year.
- Upper bound: US\$ 147,947,966 per year.

5.1.3 Private Financing

Private financing comprises resources mobilized directly by the private sector toward biodiversity through sustainable value chains and private investment financed through green debt.

5.1.3.1 Sustainable Value Chains

To estimate biodiversity-related financial flows through sustainable value chains, a review of evidence based on corporate reports was conducted. This review identified gaps and insufficient information on corporate reinvestment in the sustainability of their value chains. Most of the sustainability disclosures, integrated reports, annual reviews, corporate sustainability reports, and other documents reviewed for companies from different sectors in the region with activities relatively close to or directly related to biodiversity—including agriculture, fisheries, forestry, and palm oil, among others—did not contain explicit and disaggregated information on the amounts invested in the companies' various sustainability areas. In general, investment amounts were either reported in aggregate, with no breakdown by category—biodiversity, sustainability, energy, among others—or expressed through non-monetary indicators, such as the number of hectares reforested or restored, among other metrics.

Given that the information available for companies in the forestry sector contains the largest amount of data on investments in the "environment" and "biodiversity" categories and constitutes the most comprehensive source among the different sectors analyzed in the region, flows associated with sustainable value chains are estimated based on investment in this sector. Of the reports reviewed, those corresponding specifically to Empresas CMPC (2024), Suzano S.A. (2025), Klabin S.A. (2025), Celulosa Arauco y Constitución (2025b), Consorcio I+D+i Forestal (2022), and Forestal Argentina S.A. (2024) were used. Of these companies, five make investments directly linked to biodiversity—including biological corridors and biodiversity preservation and monitoring, among others—and four make investments in the environment in general, such as sustainability certifications, sustainable water management, and climate change adaptation.

The lower and upper bounds are established based on these two categories. The lower bound represents investment specifically allocated to biodiversity, while the upper bound is based on investment in the environment more broadly.⁷³ Therefore, the annual flow of investment in sustainable value chains falls within the following range:

- Lower bound: US\$ 20,358,532 per year.
- Upper bound: US\$ 1,044,110,731 per year.

⁷³ To estimate the lower bound, the amounts allocated to biodiversity are added together, and their share of the environmental investment reported by Empresas CMPC (2024), Suzano S.A. (2025), and Klabin S.A. (2025) is calculated. This share is then applied to the environmental investment reported by Celulosa Arauco y Constitución (2025b), which does not disaggregate the resources allocated to biodiversity. For the upper bound, the amounts allocated to the environment by CMPC, Suzano, Klabin, and Arauco are added together. These companies account for a significant share of the forestry sector in Latin America and the Caribbean.

5.1.3.2 Private Investment in Biodiversity Financed Through Green Debt

Private financing linked to biodiversity is approximated in this study based on corporate sustainable bond issuances (GSSS: *green, social, sustainability, and sustainability-linked*) in international markets by issuers from Latin America and the Caribbean in 2024, using the microdata set from the ECLAC (2025a) report, compiled from sources such as Bloomberg, Dealogic, and LatinFinance.

Based on this information, a thematic filter was applied to identify only those bonds whose use of proceeds was explicitly linked to biodiversity conservation, ecosystem protection, or sustainable natural resource management, excluding instruments primarily intended for energy, transportation, or other green infrastructure without a direct link to biodiversity. Subsequently, only private corporate issuances were selected from this group, excluding sovereign bonds and bonds issued by public entities.

Based on publicly available information on corporate sustainable bonds, the instruments were classified according to whether they had a direct, indirect, or no impact on biodiversity. The direct and indirect impact categories were used to establish the lower and upper bounds, respectively. In particular, the lower bound corresponds to an approximation that includes only private corporate issuances whose use of proceeds or financing framework explicitly identifies objectives related to biodiversity conservation, ecosystem protection, restoration, sustainable natural resource management, or NbS. The upper bound, in turn, corresponds to a scenario that, in addition to the instruments included in the lower bound, incorporates private corporate issuances classified within the universe of green or sustainable financial products that finance broader environmental objectives, such as sustainable land use, sustainable agriculture, water management, climate adaptation, natural resource conservation, or environmental sustainability, even when biodiversity is not necessarily the primary or exclusive objective of the instrument. Therefore, this scenario seeks to capture transactions that may generate indirect or complementary benefits for biodiversity, even if they are not specifically labeled as biodiversity financing.

Based on this methodology, the total value of corporate bonds with a direct impact on biodiversity issued in 2024 and adjusted for inflation to 2025 corresponds to the following amounts:⁷⁴

- Lower bound: US\$ 2,833,548,795 per year.
- Upper bound: US\$ 4,223,019,791 per year.

⁷⁴. These figures should be interpreted as minimum reference values, as they exclude other private impact investment instruments. Their implementation should also incorporate equity, inclusion, and governance criteria that promote the participation of women, rural youth, Indigenous Peoples, and local communities in ecosystem management.

Biodiversity Financing in Latin America and the Caribbean

6



This section estimates the financing gap for biodiversity conservation and restoration in Latin America and the Caribbean based on: (i) the quantification of financing needs calculated for terrestrial and marine landscapes, terrestrial and marine protected areas, and biodiversity conservation and protection actions in urban and peri-urban areas; and (ii) the estimation of financing flows directed toward the preservation of natural capital and biodiversity in the region. Accordingly, the gap is calculated as the difference between the first and second components (see Table 6).

The estimated gap for the region amounts to approximately US\$ 152.987 billion,⁷⁵ equivalent to 16.2% of the estimated global gap, which reached US\$ 942 billion (Paulson Institute, 2025). The region's biodiversity financing needs represent 14.8% of the global estimate originally prepared by Deutz et al. (2020) and updated by the Paulson Institute (2025), which amounts to approximately US\$ 1.15 trillion annually for 2024. Likewise, the costs of transitioning agriculture and livestock production toward more sustainable activities focused on the protection and restoration of natural capital account for 58.9% of the region's biodiversity financing needs, a share that increases to 67.2% when urban water treatment costs are added.

On the other hand, the region's current financing flows represent only 8.2% of global flows directed toward biodiversity, estimated at US\$ 208 billion. In other words, the region has significant potential to mobilize resources, not only to close its own financing gap, but also to help reduce the global gap. Private flows represent 18.1% of resources directed toward protecting and preserving the region's biodiversity, while domestic and international public resources account for approximately 55%.

TABLE 6

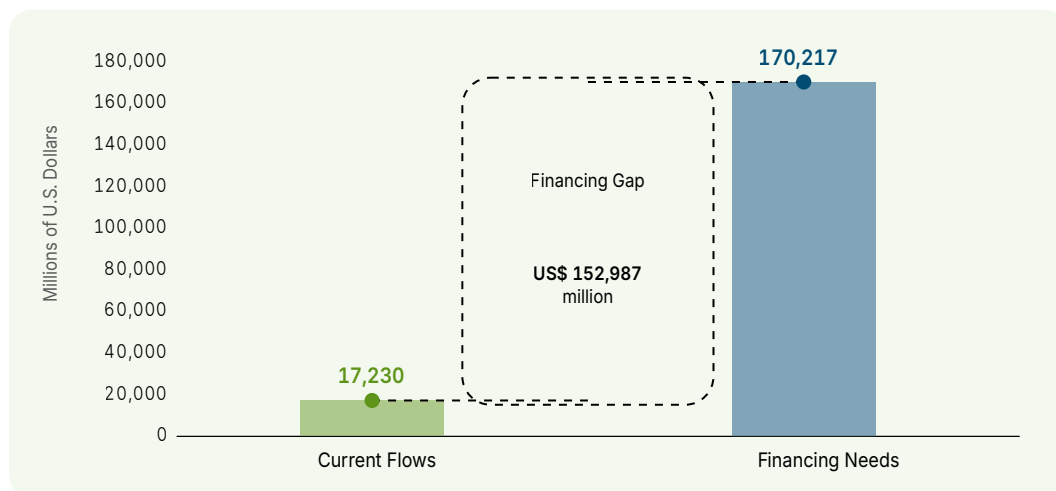
Estimate of the Annual Financing Gap for Biodiversity Conservation, Restoration, and Sustainable Use in Latin America and the Caribbean (Millions of 2025 dollars)

COMPONENTS	ESTIMATE
1. Biodiversity financing needs in Latin America and the Caribbean	170,217
2. Current financing flows directed toward biodiversity in Latin America and the Caribbean	17,230
Biodiversity financing gap in Latin America and the Caribbean	152,987

Source: Economic Commission for Latin America and the Caribbean.

⁷⁵ As mentioned in the methodological section and in the section on the estimation of financing needs, the aggregate figures incorporate estimates corresponding to two time horizons: actions linked to national commitments through 2030—in line with the KM-GBF—and structural transition processes with horizons through 2050.

FIGURE 11
Annual Biodiversity Financing Gap in Latin America and the Caribbean
(Millions of dollars)



Source: Economic Commission for Latin America and the Caribbean.

Potential to Mobilize Financing Sources by 2030

7

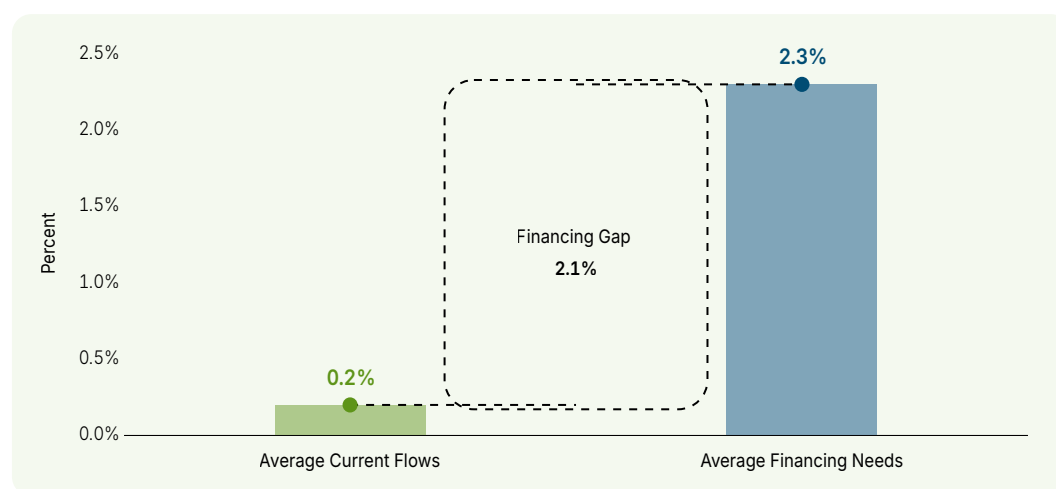


This chapter estimates the potential to mobilize resources for biodiversity by 2030, in the context of an annual financing gap of US\$ 152.987 billion (2.0%–2.4% of regional GDP), based on currently available financial flows and differentiated scenarios for resource redirection and mobilization. The analysis considers three dimensions: (i) scaling up existing financial flows; (ii) redirecting agricultural and livestock sector expenditure; and (iii) managing risks associated with investments in nature. On this basis, three scenarios are developed—prudent or conservative, intermediate or moderate, and ambitious or transformative—and their potential contributions to reducing the financing gap are estimated.

7.1 Current State of Available Flows

As mentioned, current financial flows directed toward biodiversity conservation in Latin America and the Caribbean range from US\$ 5.381 billion to US\$ 29.080 billion, with an average of approximately US\$ 17.230 billion per year. At the upper bound, 55% comes from domestic and international public flows, 27% from public-private flows, and 18% from private sources. Together, these resources represent 0.2% of regional GDP, compared with financing needs equivalent to 2.3% of GDP, resulting in an estimated financing gap of 2.1% of GDP. This shows that current financial flows remain limited relative to the scale of the challenge and that there is considerable scope to mobilize and redirect resources.

FIGURE 12
Financing Needs, Current Flows, and Financing Gap as a Share of GDP in Latin America and the Caribbean, 2025



Source: Economic Commission for Latin America and the Caribbean.

7.2 Reference Framework for Resource Mobilization

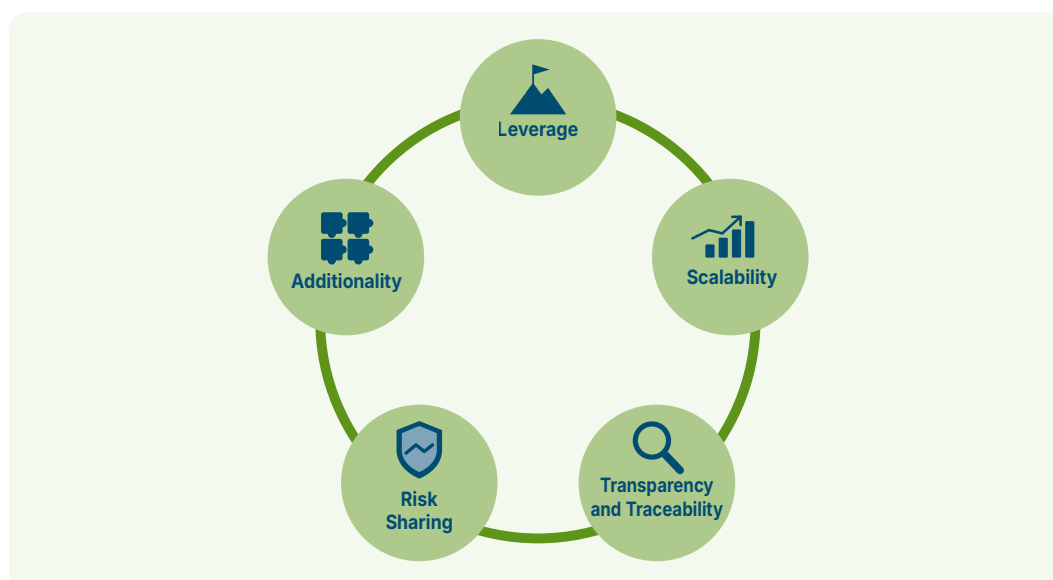
Resource mobilization is understood as the increase and channeling of public, private, and blended flows, from domestic and international sources, toward the objective of halting and reversing biodiversity loss. In line with the OECD (2023) definition,⁷⁶ this involves generating, channeling, and leveraging additional resources based on explicit assumptions about policies, financial instruments, and market conditions, within a defined time horizon.

Therefore, mobilization is not limited to accounting for existing sources, but also considers the combination of instruments and mechanisms capable of increasing the impact of biodiversity investments. These principles include leveraging private capital through public flows, the additionality of the impact generated by the intervention, the scalability of mechanisms to other initiatives, risk sharing among participating stakeholders, and transparency and traceability regarding the origin, use, and impact of resources.

⁷⁶. Mobilization: the capacity to “generate, channel, and leverage additional public, private, and blended financial flows toward a specific objective (such as halting and reversing biodiversity loss), based on a set of assumptions about policies, financial instruments, and market conditions, within a defined time horizon” (OECD, 2023).

DIAGRAM 2

Key Elements for the Potential Mobilization of Financing Resources



Source: Economic Commission for Latin America and the Caribbean.

7.3 Sources and Potential to Mobilize Financing Resources

The potential for resource mobilization is examined across three areas: the composition and growth of current financial flows, the potential to redirect agricultural and livestock sector expenditure, and the management of risks associated with investments in nature.

7.3.1 Current Flows: Composition, Magnitude, and Growth Potential

Current average biodiversity financing flows have a diverse composition, with public resources accounting for the largest share, followed by public-private flows and, to a lesser extent, private flows.⁷⁷

⁷⁷ The composition based on the upper bound of the same range, presented in Section 7.1 (55% public, 27% public-private, and 18% private), reflects the other end of the range rather than an alternative estimate (Table 7).

TABLE 7

Current Flows Available to Finance Biodiversity Conservation and Protection in Latin America and the Caribbean

		AVERAGE AMOUNT (MILLIONS OF DOLLARS)	% OF TOTAL FLOWS
1. DOMESTIC AND INTERNATIONAL PUBLIC FLOWS			
Public budgets and domestic fiscal policy (domestic public expenditure)		7,651	44.4%
International Public Financing	Bilateral ODA	584	3.4%
	Multilateral ODA	92	0.5%
	Other official flows (OOF)	108	0.6%
SUBTOTAL		8,435	49.0%
2. DOMESTIC AND INTERNATIONAL PUBLIC-PRIVATE FLOWS			
Natural infrastructure		92	0.5%
Nature-based solutions and carbon markets		99	0.6%
Biodiversity initiatives financed through green debt (green bonds)		4,305	25.0%
Biodiversity offsets		101	0.6%
Philanthropy, foundations, and conservation NGOs		138	0.8%
SUBTOTAL		4,735	27.5%
3. PRIVATE FINANCING			
Sustainable value chains		532	3.1%
Private investment in biodiversity financed through green debt		3,528	20.5%
SUBTOTAL		4,061	23.6%
TOTAL		17,230	100%

Source: Economic Commission for Latin America and the Caribbean.

Table 7 also shows that there are categories with potential for expansion within each group of flows. Among public resources, multilateral official development assistance and other official flows stand out; among public-private flows, natural infrastructure, NbS and carbon markets, biodiversity offsets, and resources from philanthropy, foundations, and NGOs offer additional room for mobilization. Regional evidence also suggests that the current instrument architecture favors fiscal mechanisms.⁷⁸

⁷⁸ According to the OECD's PINE database, the region reports 183 active instruments across 24 countries, concentrated in taxes, fees, and environmentally beneficial subsidies. Other mechanisms, such as offsets, voluntary approaches, and deposit-refund systems, are less developed, as are market-based instruments and extended producer responsibility instruments.

7.3.2 Agricultural and Livestock Sector Spending: Potential for Redirection Toward Biodiversity

Regional public expenditure on the agricultural and livestock sector represents an opportunity to mobilize resources for biodiversity, as these resources have already been allocated and can be redirected without the need to generate new financial flows. This redirection is not limited to potentially harmful subsidies—which encourage the expansion of the agricultural frontier and the intensive use of fertilizers and pesticides without environmental conditionality (UNDP, 2024c), and represent one of the most immediate opportunities—but may also involve productive development programs, agricultural credit, and technical assistance. The aim is not to eliminate subsidies, but to identify those that have negative effects on biodiversity and guide their transformation toward uses that are compatible with conservation and sustainable production practices. Furthermore, this redirection helps align productive policies with territorial resilience and ecosystem-based adaptation objectives, generating co-benefits and fostering coordination with other development agendas and priorities.

The analysis focuses on the agricultural, livestock, and fisheries sectors, as they directly correspond to the categories of managed production landscapes and production landscapes based on wild resources used to estimate financing needs. The basis for the three scenarios is regional public expenditure on agriculture, forestry, fishing, and hunting (ECLAC, 2026b; 2017–2019 average), which amounts to US\$ 17.053 billion per year. The producer support estimate (PSE) methodology is applied to IDB Agrimonitor data to identify support that could be redirected, while the Sumaila et al. (2019) database is used for the fisheries sector, with amounts expressed in constant 2025 dollars. According to Agrimonitor data, approximately 75% of support is provided through market price support, rather than direct budgetary outlays (Conroy et al., 2024; OECD, 2016). Accordingly, the analysis focuses on direct transfers.⁷⁹

7.3.3 Nature Investment Risk Management: Private and Public Sector Perspectives

This section addresses the management of risks associated with investments in nature from two perspectives: that of the private financial sector and that of the public sector. In addition to expanding current flows (7.3.1) and redirecting agricultural and livestock sector spending (7.3.2),

⁷⁹ Ecuador illustrates the scale of this opportunity: subsidies that are harmful or potentially harmful to biodiversity are equivalent to approximately four times the country's annualized biodiversity financing gap. These findings are incorporated into the three potential resource mobilization scenarios, which reflect progressively higher levels of ambition.

risk management constitutes a third dimension of the potential for mobilization. Reducing net financing needs by 2030 will depend significantly on improving the management of these risks, which are not always adequately identified, measured, and covered.

Effective risk management can help reduce the cost of capital, improve project bankability, and expand private sector participation. The main approaches to achieving this are improving information and disclosure on nature-related risks, redirecting insurance and reinsurance mechanisms to avoid covering activities that negatively affect biodiversity, and strengthening sovereign and subnational insurance coverage. This dimension is incorporated into the modeling of the scenarios, particularly through the redirection of private credit portfolios toward biodiversity (Section 7.4.6).

7.4 Potential Resource Mobilization Scenarios for Biodiversity in the Region

To model the potential for resource mobilization, the three scenarios introduced in the chapter's preamble are established: (i) *prudent or conservative*; (ii) *intermediate or moderate*; and (iii) *ambitious or transformative*. Defining these scenarios requires addressing four key aspects: the region's economic growth, regional fiscal effort, the financial conditions of the instruments or mechanisms, and the capacity to mobilize resources through leverage, additionality, and scalability. Accordingly, biodiversity financing depends not only on the scale of the economy, but also on incentives, financial architecture, and institutional capacity.

From a methodological perspective, the total potential for resource mobilization can be expressed as follows:

$$(1) FM_t = FP_t + FI_t + FPr_t + FII_t$$

where FM_t is potential resource mobilization in year t , FP_t is the mobilized domestic public flow, FI_t is the international resource flow,⁸⁰ FPr_t are the mobilized private sources, and FII_t are the flows from innovative instruments to be mobilized.⁸¹ To estimate the potential mobilization of these resource sources, it is assumed that, during the 2026–2030 period, annual flows correspond to new financing that operates under the principle of additionality.

⁸⁰. May include foreign direct investment resources, although these are not considered in the present estimate.

⁸¹. These are financial mechanisms structured to mobilize public, private, and blended resources toward biodiversity protection and the conservation, restoration, and sustainable use of ecosystems. They may include instruments such as debt-for-nature conversions, green bonds, biodiversity credits, blended finance, and carbon markets, among others. These resources may be distributed among any of the three variables above, but in this section they are grouped together.

7.4.1 Mobilization of Domestic Public Flows

In the context of mobilizing domestic public flows, GPB represents public expenditure by function allocated to biodiversity⁸² and $GPAm$ represents public environmental expenditure. Therefore, $\frac{GPB}{GPAm} = \mu_t$ represents the share of public environmental expenditure directed toward biodiversity protection. This same proportion can be applied to public expenditure in the agriculture, forestry, fisheries, and hunting sectors, net of subsidies harmful to biodiversity ($GPAGNeto$), to simulate the expenditure of these sectors allocated to the sustainable use of biodiversity. These subsidies are deducted to avoid double counting, given that each scenario includes agricultural and livestock subsidies that will be redirected toward biodiversity and sustainability. Finally, the variable PIB_{ALC} represents the value of the region's GDP in period t .

7.4.2 Mobilization of International Flows

Within the framework of international resource mobilization, these resources are expressed as follows:

$$(2) ODAB_{t-1}(1 + g_{odab,t}) + ODAM_{t-1}(1 + g_{odam,t}) + FN_{t-1}(1 + g_{fn,t})$$

In this equation, $ODAB_t$ represents the mobilization of bilateral official development assistance (ODA) resources at time t , $ODAM_t$ is multilateral ODA, and the term FN_t captures the potential mobilization of resources from global nature funds at the multilateral level, which, based on current trends in international cooperation, is expected to be relatively limited.

7.4.3 Mobilization of Private Flows

Likewise, the potential mobilization of private resources can be established as a proportion of the sum of domestic and international public flows, through the leverage these flows can exert on private investment in the environmental and agricultural and livestock sectors, both at the national level and across the region as a whole. In other words, for every dollar of domestic or international public resources allocated to biodiversity protection, two or more dollars from the private sector could potentially be mobilized. These potential sources also include credit resources directed toward nature-positive actions, the volume of which may vary depending on the scenarios proposed in the analysis.

Therefore:

$$(3) FPr = \alpha(FP + FI) + \delta CPr$$

⁸². May include operating expenditure, investment, and debt service. However, the values are not disaggregated.

In this final equation, α_t represents the leverage coefficient at time t , which can be adjusted depending on the scenario established, as discussed below. The parameter α_t may vary depending on the degree of development of sustainable bond markets, financial risk, the cost of capital, among other factors. The variable CPr represents private credit allocated to sustainability and biodiversity protection, and the parameter δ measures the degree of financial deepening, for example, private sector credit directed toward biodiversity protection as a share of regional GDP, which varies according to the proposed scenario.

7.4.4 Mobilization of Flows From Innovative Instruments

The potential mobilization of flows generated by innovative instruments and mechanisms depends on the new sources that can be identified to close the biodiversity financing gap in the region.⁸³ Accordingly, $FII_t = PSA_t + BN_t + DN_t + BF_t + MC_t$, where PSA_t represents the resources generated through payments for environmental and ecosystem services, BN_t represents the resources mobilized through green bonds,⁸⁴ DN_t is debt-for-nature conversions,⁸⁵ BF_t are mechanisms that operate as *blended finance*, and, finally, MC_t represents the mobilization of resources provided by carbon markets and other related mechanisms.

7.4.5 Redirection of Agricultural and Livestock Subsidies Potentially Harmful to Biodiversity

The estimates of agricultural and livestock subsidy redirection presented below are not added separately to the total potential resource mobilization, as they are part of the broader proposal to redirect a percentage of agricultural and livestock sector expenditure developed in Section 7.3.2. However, presenting them separately is analytically relevant for this exercise.⁸⁶

To this end, and in line with the three potential resource mobilization scenarios outlined in this section, an estimate is provided for each scenario of the volume of agricultural, livestock, and fisheries support that could be redirected toward uses compatible with biodiversity. These estimates, based on the producer support estimate (PSE) methodology applied to Agrimonitor

83. The new sources of financial resources derived from innovative instruments included in this section were not considered in the calculation of currently available flows.

84. These sources of financing are part of the public-private and private financing components included in the estimate of currently available flows.

85. Debt-for-nature conversions may constitute a source of financing for public expenditure when such expenditure is financed with resources mobilized through these instruments.

86. Quantifying the volume of support currently allocated to categories identified as potentially harmful to biodiversity helps illustrate the scope for redirection within sectoral expenditure and provides a concrete indication of the scale of the effort required to advance toward achieving Target 18 of the KM-GBF at the regional level.

data for the agricultural and livestock sector and on the Sumaila et al. (2019) database for the fisheries sector, identify the source of the share of sectoral expenditure corresponding to the redirection of potentially harmful subsidies in each scenario. In this way, they provide a more disaggregated view of the redirection effort involved in each scenario.

7.4.5.1 Scenario 1: Prudent or Conservative

This scenario includes only payments based on variable input use (PIV) in the agricultural and livestock sector, which comprise subsidies for the use of fertilizers, pesticides, fuel, and irrigation water without environmental conditionality. These subsidies have a direct impact: by reducing the private cost of inputs with negative externalities, they incentivize their use beyond the optimal level. This scenario does not include a fisheries component.⁸⁷

(4) *Subsidio a reorientar*_{Esc.1} = PIV_{agro} = 5.027 millones de dólares

7.4.5.2 Scenario 2: Intermediate or Moderate

This scenario incorporates payments based on output (PP) in the agricultural and livestock sector, which are directly linked to production volumes and may incentivize production intensification and the expansion of the agricultural frontier into high-biodiversity biomes. In the fisheries sector, it incorporates subsidies that increase fishing capacity—including vessel construction and modernization, port infrastructure, access agreements for exclusive economic zones, and direct fuel subsidies—whose impact mechanism operates by incentivizing an increase in fishing effort beyond the maximum sustainable yield.⁸⁸

(5) *Subsidios a reorientar*_{Esc.2} = $PIV_{agro} + PP_{agro} + Capacity_enhancing_{pesquerías}$ =
5.027 + 480 + 1.345 = 6.852 millones de dólares

7.4.5.3 Scenario 3: Ambitious or Transformative

Scenario 3 integrates four categories in the agricultural and livestock sector whose environmental impact depends to a greater extent on the design of the instrument and the territorial context: payments based on on-farm fixed capital formation (PIF), payments based on on-farm services (PIS), payments with production requirements referenced to area, number of

⁸⁷. It is worth noting that 80% of these types of subsidies in the region are concentrated in two countries: Brazil (52.3%) and Mexico (27.3%). Therefore, the impact of this redirection would be concentrated primarily in these two countries.

⁸⁸. As explained in the methodological section, 24% is excluded from this amount, corresponding to non-fuel tax exemptions that do not constitute budgetary allocations.

animals, or current income (PC), and payments based on historical production required (PHR).⁸⁹ In the fisheries sector, it adds ambiguous subsidies—programs providing assistance to fishers, vessel buyback programs, and rural fishing community development programs—whose impact on marine biodiversity depends on the design of the instrument and the status of the fisheries receiving them.

$$(6) \text{ Subsidios a reorientar}_{Esc.3} = Escenario_2 + PIF_{agro} + PIS_{agro} + PC_{agro} + PHR_{agro} + Ambiguous_{pesquerías} = 6.852 + 2.521 + 899 + 187 + 811 + 170 = 11.440 \text{ millones de dólares}$$

7.4.6 Redirection of Private Credit Portfolios Toward Biodiversity

The closest regional reference for approximating a potential redirection of private credit toward biodiversity is the sustainable lending market reported by the Latin American Federation of Banks (FELABAN) and S&P Global Ratings. According to this source, the cumulative volume of these loans in Latin America reached US\$ 57.490 billion between 2020 and 2025, and sustainability-linked loans accounted for 65% of the total market.⁹⁰

However, this percentage corresponds to financing directed toward sustainability in a broad sense and not to a portfolio specifically identified as nature-positive or directed toward biodiversity. Therefore, it cannot be interpreted as financing directly attributable to biodiversity, but rather as the closest available regional proxy for the purposes of this study. In the absence of a public, consistent, and verifiable classification of portfolios specifically directed toward nature-positive actions, this approximation makes it possible to prudently estimate a potential range for the redirection of private credit.

On this basis, three illustrative scenarios for redirecting resources toward biodiversity are proposed. Under the conservative scenario, 1% of the annual volume of sustainability-linked loans is assumed to be allocated to biodiversity (US\$ 62.3 million per year). Under the intermediate scenario, this share increases to 2% (US\$ 124.6 million per year), while under the more ambitious scenario, it reaches 3% (US\$ 186.9 million per year).

⁸⁹. Agrimonitor classifies these instruments into the PIF, PIS, PC, and PHR categories, in accordance with the agricultural support typology developed by the OECD. These categories constitute an analytical classification used to facilitate cross-country comparisons and do not necessarily correspond to the names used by national programs.

⁹⁰. Equivalent to US\$ 37.370 billion, or US\$ 6.230 billion per year (FELABAN and S&P Global Ratings, 2025).

These scenarios do not represent observed flows, but rather exploratory references for estimating the potential contribution of the private credit portfolio to reducing the biodiversity financing gap. In this sense, they make it possible to incorporate an indicative measure of the potential for redirecting regional sustainable credit, even though specific traceability to biodiversity remains limited.

7.5 Estimates of the Resource Mobilization Scenarios

Building on the methodological formulation for the potential mobilization of resources, three scenarios are established aimed at reducing or closing the financing gap for biodiversity in Latin America and the Caribbean.

7.5.1 Methodological Considerations

The following presents the methodological assumptions underpinning the three scenarios: prudent or conservative, intermediate or moderate, and ambitious or transformative.

7.5.1.1 Scenario 1: Prudent or Conservative (BAU)

This scenario is characterized by the continuation of current trends, without structural or significant policy reforms and with limited reliance on bilateral and multilateral official development assistance ($ODAB_t$ and $ODAM_t$).

The assumptions underlying the conservative scenario are as follows:

- Low regional GDP growth.
- Low share of public environmental expenditure and agricultural and livestock sector spending allocated to biodiversity protection.
- Redirection of PIV agricultural and livestock subsidies.
- Slow and limited growth in bilateral and multilateral ODA.
- Redirection toward biodiversity of 1% of the annual volume of sustainability-linked loans.
- Limited development of the sustainable finance market.
- Low level of leverage.

Under this scenario, μ_t remains stable or increases marginally; the growth rate of international flows is also low; the leverage coefficient is below 1 ($\alpha_t < 1$); and flows generated through innovative instruments are very low or close to zero.

7.5.1.2 Scenario 2: Intermediate or Moderate

This scenario specifically considers the implementation of global conservation funds.⁹¹ Partial fiscal reforms may also be introduced to improve the allocation of public resources toward biodiversity protection. Greater resource mobilization is expected through mechanisms such as blended finance and debt-for-nature conversions.

The assumptions underlying the moderate scenario are as follows:

- More dynamic regional GDP growth.
- Gradual redirection of public environmental expenditure and agricultural and livestock sector spending toward biodiversity protection and sustainable use.
- Redirection of PIV and PP agricultural and livestock subsidies, as well as fisheries subsidies that increase fishing capacity (*capacity-enhancing subsidies*).
- Slow and moderate growth in bilateral and multilateral ODA.
- Redirection toward biodiversity of 2% of the annual volume of sustainability-linked loans.
- Expansion of the green bond and green loan market.
- Greater leverage of resources.

Under the moderate scenario, μ_t increases linearly, the growth rate of international flows also increases moderately, $0 < \alpha_t < 2$, and flows from innovative instruments experience moderate growth.

7.5.1.3 Scenario 3: Ambitious or Transformative

Under Scenario 3, the mobilization of flows increases significantly as a result of deep institutional changes and the adoption of policies aimed at protecting the region's biodiversity. At the same time, private capital mobilization increases substantially, green debt markets become more consolidated, and global biodiversity funds grow as a result of greater commitments to countries.

The assumptions underlying the ambitious scenario are as follows:

- Reasonable economic growth, accompanied primarily by institutional reforms and adjustments.
- Substantial improvement in the redirection of public environmental expenditure and agricultural and livestock sector spending toward biodiversity protection and sustainable use.

⁹¹. With resources from the Green Climate Fund or the GEF and support from multilateral ODA.

- Redirection of agricultural and livestock subsidies under the PIF, PIS, PC, and PHR categories.
- Slow and moderate growth in bilateral and multilateral ODA, in line with the current trend of declining resources from donor countries.
- Redirection toward biodiversity of 3% of the annual volume of sustainability-linked loans.
- Deepening of sustainable markets, including carbon and green bond markets.
- Activation and expansion of innovative financing instruments.

Based on these assumptions, the ambitious or transformative scenario entails greater mobilization of public and private resources, deeper sustainable markets, and expanded use of innovative financing instruments.

7.5.2 Results of the Estimated Potential Resource Mobilization Under the Three Proposed Scenarios

The scenarios were developed based on the methodology and formulation presented above. The information is drawn from Table 7, based on the estimates of currently available flows. Regional GDP (ECLAC, 2026b) was projected through 2030 using growth rates estimated from moving averages. Likewise, the projected amounts were expressed in constant 2030 prices using the corresponding adjustments.

7.5.2.1 Scenario 1: Prudent or Conservative (BAU)

Under this prudent scenario, and taking into account the assumptions established in the previous section, mobilized public flows would amount to US\$ 6.948 billion, while mobilized international resources would reach US\$ 305 million. In turn, potentially mobilized private flows would amount to US\$ 3.689 billion, as a result of the leverage generated by public and international resources and private credit flows. Finally, resources mobilized through the activation of innovative instruments and mechanisms are estimated at US\$ 1.720 billion.

Therefore, under this scenario, additional resource mobilization would amount to approximately US\$ 12.662 billion annually by 2030. With this additional amount, current flows would increase by 73.5% to reach US\$ 29.892 billion annually. Consequently, the biodiversity financing gap would be reduced to US\$ 140.325 billion, representing a reduction of only 8.3% (see Table 8).

7.5.2.2 Scenario 2: Intermediate or Moderate

Under this second scenario, based on the assumptions established above, mobilized public flows by 2030 would amount to US\$ 14.154 billion. Mobilized international flows would reach US\$ 305 million, based on the assumption of slow and moderate growth. The potential mobilization of private flows, through leverage generated by public and international resources and private credit resources, would amount to US\$ 21.814 billion.

In turn, resources mobilized through innovative instruments and mechanisms—primarily blue bonds and debt-for-nature conversions in the region’s island countries—would amount to US\$ 5.467 billion. Therefore, under this scenario, additional resources mobilized annually would amount to approximately US\$ 41.742 billion. Total annual flows would thus reach US\$ 58.972 billion. Assuming that financing needs remain constant, the gap would be reduced to US\$ 111.245 billion, equivalent to a 27.3% reduction (see Table 8).

7.5.2.3 Scenario 3: Ambitious or Transformative

Under this final scenario, potential annual mobilization of public flows is projected to reach US\$ 25.919 billion in 2030 prices, as a result of adjustments to fiscal frameworks to manage environmental expenditure more effectively and redirect agricultural and livestock sector spending, including policy instruments such as subsidies harmful to biodiversity. Likewise, mobilized international flows would again approach US\$ 305 million, based on the assumption of slow and moderate growth, as can be expected in the near term.

The change in the trend of resources mobilized by the region’s public sector and through international sources would make it possible to leverage private capital which, together with credit resources, would reach approximately US\$ 78.860 billion annually. Finally, innovative instruments and mechanisms—including payments for environmental services (PES), debt-for-nature conversions, and blended finance, among others—would facilitate the mobilization of approximately US\$ 8.201 billion annually.

Taken together, the third scenario would make it possible to mobilize an additional US\$ 113.286 billion per year. This volume is equivalent to approximately 6.6 times the estimated current flows and would increase total flows to US\$ 130.516 billion annually. If the estimated financing needs remain constant, the gap would be reduced to US\$ 39.701 billion. Therefore, the additional resources mobilized under this scenario would contribute to reducing the gap by approximately 74%.

Table 8 provides an aggregate summary of the annual resources that could potentially be mobilized under each scenario and their relative contribution to reducing the estimated gap.

TABLE 8

Financial Flows With Potential for Mobilization Under Three Scenarios

SCENARIOS	ANNUAL FINANCIAL FLOWS MOBILIZED BY 2030 (MILLIONS OF DOLLARS)	CONTRIBUTION TO THE REDUCTION OF THE ESTIMATED GAP
Scenario 1: Prudent or Conservative	12,662	8.3%
Scenario 2: Intermediate or Moderate	41,742	27.3%
Scenario 3: Ambitious or Transformative	113,286	74.0%

Source: Economic Commission for Latin America and the Caribbean.

Potential Resource Mobilization Strategy

8



Closing the biodiversity financing gap in Latin America and the Caribbean is a strategic priority for the region's sustainable development. This gap stems not only from a lack of resources but also from insufficient recognition of the links between economic growth, natural capital, and biodiversity, as well as the structural misalignment between economic and financial systems and the objectives of biodiversity conservation and sustainable use. Addressing it therefore requires a profound transformation of the public policies, incentives, and financial flows that shape development trajectories.

The financing needs of countries in the region, together with their national biodiversity targets, instruments, and commitments, send a clear signal: closing the gap requires not only mobilizing resources on a much larger scale, but also redirecting existing flows toward activities compatible with biodiversity. This entails integrating this agenda into economic and fiscal planning, strengthening coherence across sectoral policies, redirecting public expenditure, reviewing harmful incentives, and consolidating financing mechanisms from all sources—public, private, domestic, and international—in line with priorities defined by the countries themselves.

For Latin America and the Caribbean, this challenge also represents an opportunity. As one of the planet's major reservoirs of biodiversity, the region is well positioned to move toward development pathways that are more compatible with nature, based on its own productive, territorial, and institutional priorities. However, harnessing this potential requires a resource mobilization strategy that coherently brings together a range of instruments and stakeholders, combining stronger public financing, private capital mobilization, the scaling of innovative financial instruments, and the development of institutional capacities.

Therefore, the solution does not lie solely in increasing the volume of resources, but in building a financial architecture that can realign flows, align incentives, reduce risks, and create conditions for long-term investment. This entails, among other measures, reforming harmful subsidies, strategically redirecting public expenditure, using concessional financing to leverage private investment, deploying risk mitigation instruments, and consolidating results-based mechanisms—such as payments for environmental services and biodiversity credits—that can channel resources toward activities with verifiable impacts.

It is also essential to recognize that mobilizing resources for biodiversity cannot be regarded solely as a regional responsibility. Given the contribution of Latin America and the Caribbean's biodiversity to global public goods—such as climate stability, food security, and ecosystem resilience—closing this gap should be understood as part of a shared global effort requiring greater international solidarity, access to concessional financing, and stronger multilateral mechanisms.

Within this framework, this document proposes three areas of action under an ambitious or transformative scenario, in a context where strengthening institutional capacity is of cross-cutting importance:⁹² (i) redirecting public financing; (ii) mobilizing private capital and biodiversity-oriented investment; and (iii) scaling innovative instruments and mechanisms. Rather than offering definitive solutions, these areas seek to guide action, identify concrete opportunities, and lay the foundations for a work agenda that will make it possible, in the coming years, to translate political commitment into effective financial flows that contribute to halting and reversing biodiversity loss by 2030.

8.1 Redirecting Public Financing

The redirection of public financing encompasses resources mobilized by the public sector toward biodiversity, both at the domestic level and through international cooperation.

8.1.1 Domestic Public Financing

Domestic public financing constitutes the structural and indispensable foundation of efforts to conserve, restore, and sustainably use biodiversity. Currently, national, subnational, and sectoral budgets directly finance protected area management, the restoration of degraded ecosystems, the sustainable management of natural resources, and the provision of environmental public goods.

However, the fiscal constraints facing countries in the region make it necessary to prioritize the redirection of public expenditure, particularly by identifying, reforming, or eliminating incentives and subsidies that have negative impacts on biodiversity, especially in sectors such as agriculture, livestock, fisheries, energy, transportation, infrastructure, and land use.

In this context, biodiversity and ecosystem services need to be explicitly integrated into national planning and budgeting systems, for example, through environmental budget tagging, national biodiversity plans, and natural capital accounts. This makes it possible not only to increase resources, but also to improve the efficiency, traceability, and coherence of public expenditure. These types of measures have already been implemented in several countries in the region and could be expanded to others (see Table 9).

⁹². Institutional capacity (of the State, private organizations, local communities, and other actors operating on the ground) is just as important as the three areas identified above, as it enables financing and ensures the effective deployment of resources for biodiversity.

TABLE 9

Examples of Financial Mechanisms Implemented for the Public Financing of Biodiversity Targets

COUNTRY AND MECHANISM	DESCRIPTION
Brazil: Amazon Region Protected Areas Program (ARPA)	Brazil finances the management of more than 60 million hectares of protected areas in the Amazon through a combination of federal public funding and an endowment fund managed by FUNBIO. This scheme ensures long-term financing for recurring conservation costs and strengthens the financial sustainability of the Amazon's largest network of protected areas (Cabrera et al., 2021).
Colombia: Public Environmental Budget and Biodiversity Tagging	Under the National Development Plan 2022–2026, Colombia has made progress in identifying public expenditure with positive and negative impacts on biodiversity, incorporating reforms to sectoral incentives and subsidies. This approach builds on exercises developed under the UNDP BIOFIN initiative with entities such as FINAGRO (UNDP, 2024a, 2024b).
Mexico: Public Financing for Natural Protected Areas	The National Commission of Natural Protected Areas (CONANP) channels federal budget resources toward the management, restoration, and conservation of more than 180 protected areas, supplemented by subnational and international cooperation resources, thereby reinforcing the structural role of domestic public expenditure.

Source: Economic Commission for Latin America and the Caribbean.

In this regard, the region faces the challenge—and strategic opportunity—of assessing, adapting, and scaling these mechanisms, identifying those with the greatest regional relevance and potential for systemic impact. Regional coordination can generate economies of scale, strengthen technical capacities, facilitate the exchange of experiences, and support the development of shared instruments or platforms.

On the fiscal front, governments need to prioritize measures to effectively correct and redirect low and fragmented public environmental expenditure through green budget reallocations aimed at biodiversity—ranging from 0.1% to more than 0.3% of regional GDP—as well as through structural fiscal reforms that strengthen revenue collection, such as carbon taxes or intergovernmental transfers conditional on conservation. Regulatory and legal frameworks also need to be adjusted to facilitate the redirection of resources toward biodiversity protection and sustainable use, while providing private sector stakeholders with stability and legal certainty to encourage long-term investment.

8.1.2 International Public Financing

International financial flows must also be mobilized and scaled up through coordinated regional negotiations, large-scale programs, and blended financing mechanisms, with the aim of doubling or tripling these flows by 2030. Under this strategy, environmental and climate funds⁹³ and multilateral development banks are key sources of international concessional financing for biodiversity in Latin America and the Caribbean.⁹⁴

Although challenges remain regarding effective access to these resources, the scale of available flows, their long-term sustainability, and institutional capacities for project formulation, implementation, and monitoring, these funds serve a dual strategic function. On the one hand, they finance direct interventions and initiatives aligned with national priorities and international commitments. On the other, they serve as leverage and cofinancing mechanisms, mobilizing additional resources from national budgets, bilateral cooperation, multilateral development banks, and private capital. Their relevance is particularly high for countries with limited fiscal capacity or greater environmental vulnerability.

The region has a strategic opportunity to leverage and coordinate financial mechanisms that already exist at the regional level and within the framework of the Convention on Biological Diversity. Among these, the recently established Cali Fund, adopted through Decision 16/2 of COP16, is emerging as a mechanism to channel resources in innovative ways and at scale.⁹⁵

The Global Biodiversity Framework Fund (GBFF), together with established mechanisms such as the Global Environment Facility (GEF), is likewise a key pillar for channeling international public resources in support of countries in the region, in line with the KM-GBF. Strengthening and coordinating these mechanisms with emerging instruments such as the Cali Fund can help consolidate a broader, more diversified, and scalable financial architecture and channel greater financing flows toward biodiversity in the region by 2030.

⁹³. Climate finance, particularly financing for ecosystem-based adaptation, offers significant synergies with biodiversity conservation, restoration, and sustainable use objectives. However, its analysis falls outside the scope of this exercise, which focuses on estimating the biodiversity financing gap.

⁹⁴. These include the Global Environment Facility (GEF), the Green Climate Fund, the Adaptation Fund, the World Bank, the IDB, and the Development Bank of Latin America and the Caribbean (CAF), which channel grants, concessional financing, and results-based payments toward ecosystem conservation, restoration, and sustainable use initiatives.

⁹⁵. This fund is an emerging component of the biodiversity finance architecture, with the potential to mobilize contributions from the private sector involved in digital sequence information on genetic resources to support conservation and the fair and equitable sharing of benefits. The region has an opportunity to strengthen and scale up the Cali Fund by promoting private sector participation and creating the conditions for sustained contributions.

8.1.2.1 Bilateral Cooperation

Bilateral cooperation remains an important source of biodiversity financing in the region, channeled through grants, technical cooperation, and concessional financing. Many bilateral donors prioritize programs related to forest conservation, ecosystem and landscape restoration, the bioeconomy, NbS, and climate resilience, all of which are closely linked to biodiversity objectives.

At the regional level, development banks and integration mechanisms play a catalytic role by combining financing, technical assistance, and policy dialogue. These actors facilitate the implementation of larger-scale programs, the exchange of experiences, and the alignment of investments with regional priorities, thereby strengthening the coherence and impact of interventions.⁹⁶

8.1.2.2 Multilateral Development Banks and Development Finance Institutions

Multilateral development banks and development finance institutions provide large-scale resources through sovereign loans, subnational financing, guarantees, credit lines, and blended financing mechanisms. In Latin America and the Caribbean, these institutions are increasingly integrating biodiversity and ecosystem services into sectors such as water supply and basic sanitation, energy, green infrastructure, sustainable agriculture, watershed management, resilient cities, and climate change adaptation.

⁹⁶. These initiatives include: (i) the *BIOFIN initiative (UNDP)*: BIOFIN currently supports more than a dozen countries in the region—including Peru, Ecuador, Colombia, Mexico, and Chile—in developing national biodiversity finance plans and implementing financial solutions by combining technical assistance, bilateral cooperation, and GEF financing (UNDP, 2024a, 2024b); and (ii) *regional cooperation through the IDB and ECLAC*: the IDB and ECLAC promote regional fiscal and financial dialogue on biodiversity, including a seminar held in Bogotá, Colombia, in 2024, which focused on mainstreaming biodiversity into national financial and budgetary systems in the context of COP16 (ECLAC, 2024b). Along the same lines, during COP16, the region's ministries of finance, economy, and treasury, through the Regional Climate Change Platform of Economy and Finance Ministries of Latin America and the Caribbean—for which the IDB serves as technical secretariat—announced the creation of a dedicated working group to integrate biodiversity into national fiscal and financial policies, marking the first regional initiative of its kind (IDB, 2024b).

Although this financing is not always explicitly labeled as biodiversity financing, its transformative potential is significant when it incorporates conservation, restoration, and sustainable use criteria and is combined with concessional resources to reduce risks, improve project bankability, and attract private investment.⁹⁷

In Latin America and the Caribbean, various recent experiences show that these instruments are not only viable but can also be adapted to the region's fiscal and structural realities. Examples such as debt-for-nature conversions implemented in Ecuador, debt-for-climate-resilience operations promoted by Barbados, and environmental performance-linked loans developed in Uruguay demonstrate the potential to innovate in the financial architecture to align sustainability, debt management, and natural capital conservation. In this context, the IDB has promoted initiatives such as debt-for-nature conversions in Ecuador and the Amazonia Forever program, aimed at mobilizing resources for conservation through innovative financial mechanisms (IDB, 2023, 2024c). Likewise, the sustained growth of thematic bonds in the region and proposals such as the Tropical Forest Forever Facility (TFFF) reflect growing interest in developing mechanisms capable of mobilizing resources on a larger scale.

8.2 Mobilizing Private Capital and Biodiversity-Oriented Investment

Private capital mobilization is examined across three areas: its mobilization potential, the enabling conditions that support it, and regional experiences that illustrate its application.

8.2.1 Potential for Private Capital Mobilization

The private sector remains an underutilized source of biodiversity financing in the region, despite the high dependence of national economies on natural capital. Currently, private investment is concentrated in specific niches, such as sustainable value chains, certification schemes, environmental offsets, and certain green financial instruments.

The expansion of private financing faces structural barriers, including perceptions of high risk, long-term return horizons, the absence of clear regulatory signals, and a limited supply of bankable projects. Overcoming these constraints requires developing appropriate financial

⁹⁷. Specific examples include adaptation, sustainable agriculture, and ecosystem restoration projects financed by the IDB and CAF, which generate direct biodiversity benefits even when they are not explicitly labeled as such (Aguilar Mena and Valenzuela Camacho, 2026; CAF, 2024), and the Amazon Sustainable Landscapes Program (ASL), supported by the World Bank, which combines loans, GEF grants, and climate finance to strengthen protected areas and productive landscapes in Brazil, Colombia, and Peru (Cabrera et al., 2021).

instruments, clear regulatory frameworks, and environmental and social integrity standards, as well as strategically using public and concessional financing to mobilize private investment through blended financing schemes.

In this context, and in line with the areas of action identified in the regional analysis, certain financing needs aligned with the KM-GBF targets have greater potential to attract private investment.⁹⁸ This is because they make it possible to structure business models, generate revenue streams, and capture economic value from natural capital.⁹⁹

8.2.2 Enabling Conditions for Private Investment Mobilization

Realizing this potential depends critically on the ability of public frameworks to reduce risks, ensure environmental integrity, and create conditions for profitability and scalability that are compatible with the region's objectives and the targets of the KM-GBF. In this regard, implementing an effective resource mobilization strategy requires moving from private financing that remains marginal toward a structural source of financing through enabling conditions that support progress on taxonomies, regulation, and metrics; activate thematic bond and fund markets; and reduce risks through guarantees and insurance.¹⁰⁰

8.2.3 Regional Experiences in Private Capital Mobilization

The region already has emerging experiences that illustrate this potential and offer valuable lessons for scaling. For example, in Colombia, BBVA issued the world's first biodiversity bond in 2024, for US\$ 70 million, with support from the International Finance Corporation (IFC) and IDB Invest, to finance regenerative agriculture and ecosystem restoration; subsequently, Davivienda announced a similar issuance. Likewise, in Ecuador, IDB Invest supported the issuance of a US\$ 80 million blue bond to finance sustainable fisheries, sanitation, and waste management, linking private investment to marine conservation.

⁹⁸. In particular, those related to ecosystem restoration (Target 2), the transformation of production systems (Target 10), and the development of instruments associated with environmental offsets, the bioeconomy, and the adoption of good practices in extractive sectors.

⁹⁹. This potential can be realized through mechanisms such as payments for environmental services, biodiversity credits, sustainable value chain financing, and capacity- and knowledge-building aimed at higher value-added activities.

¹⁰⁰. These conditions are addressed in the roadmap in Chapter 9, particularly Section 9.3.

8.3 Biodiversity Financing Instruments and Mechanisms

Biodiversity financing instruments and mechanisms comprise innovative financial instruments, philanthropy, and local mechanisms, as well as a catalog that systematizes their application in the region.

8.3.1 Innovative Financial Instruments

These instruments are emerging as key mechanisms for mobilizing additional resources and diversifying sources of biodiversity financing. They include payments for environmental services, green and blue bonds, sustainability-linked sovereign bonds, debt-for-nature conversions, results-based financing, and emerging biodiversity credit markets. In Latin America and the Caribbean, these instruments offer particularly relevant opportunities given the region's fiscal constraints, high levels of indebtedness, and wealth of natural capital. In this context, the IDB CLIMA Pilot Program provides an example of results-based financing by incorporating financial incentives linked to the achievement of verifiable nature and climate objectives (IDB, 2024d).

The region already has concrete experiences in applying these instruments. One example is Costa Rica's national Payment for Environmental Services (PES) Program. Administered by FONAFIFO, this program is one of the most well-established in the world and was recently expanded to marine and coastal ecosystems, including mangroves, with support from the World Bank (Fundar, 2025).

However, the effective contribution of these instruments to closing the financing gap depends on the existence of sound governance mechanisms, adequate institutional capacities, and robust safeguards that ensure real, measurable, and lasting benefits for biodiversity and local communities. In this regard, promoting and scaling these instruments, together with strengthening carbon markets and developing regional funds, constitutes a strategic priority.

Their deployment requires strengthening enabling conditions in the region, particularly the capacity to design and structure bankable projects, as well as monitoring, traceability, and impact assessment systems.¹⁰¹

¹⁰¹. These conditions are addressed in the roadmap in Chapter 9, particularly Sections 9.3 and 9.4.

8.3.2 Philanthropy, Communities, and Local Mechanisms

Philanthropy, together with community-based and local financial mechanisms, plays a catalytic and complementary role, particularly in the early stages of initiatives, innovation processes, and support for initiatives led by local communities and Indigenous Peoples. Although their contribution in terms of financial volume is limited compared with other sources, their impact can be significant by strengthening capacities, generating replicable models, and mobilizing additional resources.

These mechanisms are particularly relevant for promoting inclusive, territorial, and culturally appropriate approaches, contributing to the social and environmental sustainability of interventions and helping address the region's financing needs.¹⁰²

8.3.3 Catalog of Biodiversity Financing Instruments and Mechanisms

The study includes a catalog of biodiversity financing instruments and mechanisms, based on a complementary regional review and a comparative analysis of Chile, Colombia, and Mexico. The catalog distinguishes between financial instruments (bonds, loans, and subsidies) and financing mechanisms (funds, trusts, and programs), and analyzes them according to their pathway to biodiversity (direct or indirect) and their function in addressing the gap (mobilizing resources, redirecting flows, improving efficiency, and reducing risks). The link to biodiversity is not always direct; it may also be established through instruments associated with water, forests, agricultural and livestock production, fisheries, climate change, and land-use planning.

The regional review shows that the architecture of environmental instruments relies primarily on fiscal and public incentive instruments: according to the OECD's PINE database, 70% of active instruments in 24 countries consist of taxes and fees. Of the 93 instruments specifically tagged as biodiversity-related, Colombia accounts for 23, Costa Rica and Mexico for 16 each, and Chile for 15.¹⁰³

¹⁰². The region has experiences that illustrate these types of mechanisms, such as environmental endowment funds in Peru and Colombia. The Peruvian Trust Fund for National Parks and Protected Areas (PROFONANPE) and the Natural Heritage Fund (Fondo Patrimonio Natural) in Colombia combine philanthropy, international cooperation, and public resources to finance conservation initiatives led by local communities and Indigenous Peoples (Cabrera et al., 2021).

¹⁰³. Cases such as the BIOFIN initiative, which identified up to 63 instruments and mechanisms in Colombia (UNDP, 2025), including interactions between the public and private sectors at both the national and international levels, suggest that the values used here may be conservative. However, given the lack of similar analyses for most countries in the region, the PINE database is used because it provides consolidated results for 24 countries in the region.

The three case studies also show a predominance of the public sector—10 of 21 instruments in Chile, 38 of 54 in Colombia, and 13 of 19 in Mexico—although differences exist in the composition of their portfolios. Chile combines financial innovation instruments with established public programs; in Colombia, the Fund for the Financing of the Agricultural Sector (FINAGRO) has the potential to bring together public and private resources and promote conservation investments in the agricultural and livestock sector; and Mexico’s portfolio focuses on territorial instruments and payment for environmental services, together with conservation funds such as the Mexican Fund for the Conservation of Nature (FMCN).

Roadmap for Action in the Region



The estimates presented in this study should be interpreted as an approximation based on the best available evidence and explicit assumptions. They do not constitute an exhaustive or definitive estimate of all financing needs and flows, but they do provide a useful order of magnitude to guide policy priorities, identify bottlenecks, and facilitate the development of an action agenda focused on the conservation and protection of natural capital and biodiversity. From this perspective, closing the financing gap in Latin America and the Caribbean requires simultaneous transformation in resource allocation and in the management of nature-related risks. The mobilization of financing is constrained not only by the availability of resources, but also by the existence of policy, financial, and regulatory frameworks that do not adequately internalize the risks arising from the degradation of natural capital in the region's economies. In this context, redirecting financial flows, transforming risk management, and strengthening the financial architecture constitute inseparable dimensions of a single approach, particularly relevant in a region characterized by fiscal constraints and growing demands for economic and social development.

Recent exercises developed in the region—including the Economic Transformation Roadmaps published by UNEP-WCMC for Colombia and Ecuador under the Nature Transition Support Programme—identify opportunities that converge with the approaches set out in this roadmap.

A roadmap structured around five interrelated phases is proposed: (i) redirecting financial flows through a policy coherence approach; (ii) integrating nature-related risks into economic and financial decision-making; (iii) mobilizing private sector resources through instruments and enabling conditions; (iv) strengthening governance, integrity, and territorial implementation; and (v) strategically positioning the region within the international financial architecture. Implementing these phases requires a gradual and sequenced approach, with an initial horizon through 2030, in line with the region's financing needs and national commitments.

However, given the scale of the transformation required and the region's structural constraints, this horizon should be understood as a starting point that will likely need to be extended and adapted according to national capacities, priorities, and contexts. Effective implementation of this roadmap also requires the coordinated participation of multiple stakeholders—the public sector, financial system, private sector, civil society, Indigenous Peoples, and local communities—which underscores the importance of regional and international institutions in mobilizing and coordinating action. Organizations such as ECLAC, the IDB, other United Nations system agencies, multilateral development banks, and cooperation agencies are called upon to play a key role in aligning efforts, strengthening capacities, and scaling solutions that can help close the biodiversity financing gap in the region.

The convergence between biodiversity financing and ecosystem-based adaptation objectives represents an opportunity to increase the scale and impact of the investments required by facilitating the mobilization of resources toward interventions that simultaneously contribute to biodiversity conservation and strengthen territorial resilience.

9.1 Redirecting Financial Flows Through a Policy Coherence Approach

The first recommendation is to place the redirection of existing financial flows at the center of the strategy, explicitly strengthening policy coherence. In the region, a significant share of public expenditure, credit, and private investment continues to operate under incentives and signals that are inconsistent with biodiversity conservation and sustainable use objectives, stemming from fiscal, regulatory, and support instruments. This lack of coherence not only reduces the effectiveness of environmental financing but also increases perceived risk, raises financing costs, and discourages the participation of private and financial sector actors.

In a restrictive fiscal environment, the priority is not to increase expenditure, but to reconfigure it by improving the coherence, effectiveness, and alignment of existing public expenditure and integrating biodiversity criteria into fiscal, budgetary, productive, financial, and territorial instruments. Redirecting harmful subsidies is part of this agenda, whose effectiveness depends on a broader policy coherence framework. This reconfiguration makes it possible to expand the scope for public action without relying on increases in expenditure.¹⁰⁴

9.2 Transforming Nature-Related Risk Management as an Enabling Condition

The second recommendation is to transform the management of nature-related risks. Biodiversity loss generates physical, transition, systemic, and liability risks that affect macroeconomic stability, fiscal sustainability, the resilience of production systems, and the soundness of the financial system. These risks are particularly relevant in natural

¹⁰⁴ These efforts should be complemented by substantial improvements in oversight, enforcement, and compliance mechanisms. When noncompliance entails low costs or detection rates are low, practices that harm nature tend to become normalized. Clear regulatory frameworks and consistent enforcement, by contrast, increase the expected cost of noncompliance and strengthen the private sector's response to policy signals—a prerequisite for an efficient transition.

resource-intensive sectors and can affect country risk, increasing the cost of debt and international financing (Agarwala et al., 2026). However, they continue to be underestimated or addressed in a fragmented manner in public and private decision-making.

Incorporating these risks entails recognizing the conservation of natural capital as a component of economic growth and the reduction of systemic risks. Accordingly, it is necessary to strengthen tools for assessing and analyzing dependencies and impacts on biodiversity, as well as the associated financial and investment risks.

It is also necessary to comprehensively incorporate natural capital, biodiversity, and ecosystem services into development planning and into public and private investment decisions and incentives, in order to reduce degradation and its economic, social, and environmental repercussions.¹⁰⁵

9.3 Mobilizing the Private Sector Through Clear Rules and Enabling Conditions

The third recommendation is to mobilize the private sector through the development and scaling of innovative financial instruments. Effective private sector participation depends on predictable regulatory frameworks, risk mitigation mechanisms, reliable information, and risk-adjusted return conditions compatible with the investments required.

Scaling these instruments requires addressing structural market failures, particularly the persistent undervaluation of ecosystem services, through consistent price signals—including price guarantee mechanisms—and changes in consumption and production preferences. This entails moving from approaches focused on compensating for damage toward proactive investment schemes in ecosystems as strategic assets, recognizing the rights, flows, and benefits associated with their conservation, restoration, and sustainable use. Within this framework, it is essential to consolidate a coherent financial ecosystem that can attract private capital to strategic sectors—in particular, agriculture, fisheries, and forest systems—and integrate nature-related risks and opportunities into financial decision-making.

¹⁰⁵. It is also advisable to promote risk mitigation and transfer instruments, such as guarantees, insurance, and blended financing, in which the insurance sector can play a significant role in improving the bankability of biodiversity investments (see Section 7.3.3).

9.4 Strengthening Enabling Conditions, Territorial Governance, and Instrument Integrity

Resource mobilization requires frameworks that provide legal certainty, transparency, and accountability and ensure the fair and equitable distribution of benefits. To this end, it is necessary to advance regulatory and institutional adjustments that establish clear enabling conditions for channeling resources toward initiatives that simultaneously promote environmental conservation and economic prosperity. These frameworks should include robust environmental and social safeguards, protect the rights of Indigenous Peoples and local communities, and strengthen their inclusive participation in decision-making.

The integrity of nature financing instruments will depend on the quality of their measurement, monitoring, reporting, and verification systems, as well as on the clarity of the governance arrangements underpinning them. Transparency, traceability of results, and the credibility of metrics are necessary conditions for attracting investment, avoiding double counting, reducing reputational risks, and ensuring that ecological and social benefits are effectively realized. At the same time, the territorial dimension should be understood as a condition for the legitimacy, sustainability, and scalability of financial mechanisms. Civil society and its various stakeholders in the region also have an important role to play in territorial governance, as well as in the design and implementation of initiatives aimed at the sustainable use, conservation, and protection of biodiversity and natural capital. Likewise, the public sector plays a key role in designing and implementing initiatives when obstacles are identified at these stages of the project cycle and when territorial stakeholders have limited management capacity.

Recognizing the Differentiated Roles of Stakeholders

The public sector plays a central role as an enabler and manager of systemic risks through regulation, the strategic use of fiscal and financial instruments, fiscal planning, public investment assessment, and debt management. In the context of Latin America and the Caribbean, this role is exercised primarily by improving the effectiveness of existing public expenditure and its catalytic capacity, rather than through significant budget expansions.

The private sector and domestic and international financial systems play a key role in internalizing and managing nature-related risks. Their effective participation depends on frameworks for assessing, disclosing, and managing nature-related risks and on instruments that make it possible to share, transfer, or reduce such risks. International cooperation and multilateral development banks act as enablers of the redirection of flows, supporting policy reforms, strengthening technical capacities, and structuring instruments that reduce risks and

leverage private and domestic resources. Civil society, nongovernmental organizations, and philanthropy play a complementary role in generating information, monitoring, innovation, and territorial implementation.¹⁰⁶

9.5 Positioning the Region in the International Financial Architecture

Closing the biodiversity financing gap in the region also requires recognizing the international dimension of the issue and moving toward a more strategic position within the global financial architecture. The region holds a significant share of the planet's natural capital and generates global public goods that are essential to climate stability, food security, and the functioning of the global economy. However, this contribution is not adequately reflected in financing conditions, sovereign risk metrics, or debt sustainability frameworks.

In this context, it is necessary to incorporate the value of natural capital and ecosystem services into discussions on debt, credit ratings, and access to international financing. Biodiversity loss and the depletion of natural capital, as well as the impacts of extreme climate events, can affect economic growth and stability in the region and generate fiscal vulnerabilities, which tend to increase sovereign risk (Wollenweber et al., 2026; Ministry of Finance, Planning and Economic Development, 2026). Therefore, it is necessary to advance innovative mechanisms such as debt-for-nature conversions, environmental performance-linked instruments, and schemes that explicitly recognize the region's role in providing global public goods. It is also necessary to strengthen the negotiating capacity of countries in the region to influence these forums, so that the conservation of biodiversity and natural capital does not represent an additional burden but rather an opportunity to improve financing conditions and support more sustainable development pathways. To this end, the opportunities created by the recent international agenda can also be leveraged, including the resource mobilization roadmap agreed at COP16, its progression toward COP19, and each country's national commitments.¹⁰⁷

¹⁰⁶. Implementing these policies requires territorial and local reference frameworks, as well as intervention units (such as watersheds) that bring together agriculture, mining, energy, and infrastructure from a systems perspective and through locally scaled financing mechanisms.

¹⁰⁷. In parallel, the region should maximize access to and the strategic use of existing international financing mechanisms, ensuring their complementarity with national and regional instruments. This requires strengthening technical capacity, as well as project preparation, quality, and formulation, while ensuring alignment with national priorities and international financing criteria.

9.6 Cross-Cutting Considerations for Implementing the Roadmap Toward 2030

Implementing the roadmap requires adopting a gradual, adaptive approach focused on developing concrete instruments, recognizing that transforming the financing system and the management of nature-related risks is a medium-term process. The indicative contribution shares for 2030 should be understood as progressive targets that will depend on countries' capacity to develop, implement, and scale specific instruments, as well as on the evolution of the macroeconomic and fiscal context.

Within this gradual implementation approach, the roadmap can begin with a strategic prioritization of actions, taking into account three key elements: (i) national biodiversity targets; (ii) each country's sectoral and territorial priorities; and (iii) the degree of institutional progress and availability of instruments at the regional level. Not all countries start from the same point or face the same challenges, so the sequencing of actions should be differentiated while maintaining a common strategic direction at the regional level.¹⁰⁸

Available evidence shows significant heterogeneity in the degree of progress across countries in the region.¹⁰⁹ To date, several countries have updated their NBSAPs and defined national targets with varying levels of ambition and detail. While some have established a broad range of targets—including Costa Rica, Mexico, and Honduras—others have defined a more limited set, reflecting differences in technical capacities, methodological approaches, and national priorities.

Countries have also identified common challenges that constrain the implementation of these targets, including the limited integration of biodiversity into key productive sectors—such as agriculture, fisheries, mining, and energy—and cross-cutting areas such as infrastructure and urban development; weaknesses in interinstitutional coordination; fiscal constraints; and a lack of continuity in public policies. They have also highlighted the need to strengthen the effective participation of Indigenous Peoples, local communities, subnational governments, and other territorial stakeholders, as well as to broaden the conservation approach to underrepresented ecosystems, such as drylands, wetlands, mountains, and marine and coastal ecosystems.¹¹⁰

¹⁰⁸. Biodiversity investments can generate synergies across sectors such as water, agriculture, energy, and infrastructure, improving resource allocation and the effectiveness of interventions. Identifying these synergies requires watershed-level analysis, with water serving as the integrating element. Such an analysis is beyond the scope of this regional exercise.

¹⁰⁹. See: <https://ort.cbd.int/>.

¹¹⁰. The region nevertheless has an existing foundation of capacities and experience on which to build, including regulatory frameworks and governance mechanisms in several countries, technical capacities strengthened through GEF projects, and valuable experience in territorial governance, landscape management, and community- and Indigenous-led monitoring.

In terms of opportunities, countries have identified specific areas in which regional cooperation can accelerate implementation, such as ecosystem restoration, strengthening regulatory frameworks for protected areas and OECMs, integrating biodiversity into territorial planning, managing invasive species, conserving threatened species, and combating illegal wildlife trafficking. Improving biodiversity information systems and promoting ecological connectivity and cross-border cooperation approaches have also been highlighted as strategic areas for advancing national and regional targets simultaneously.

In this context, prioritizing the roadmap should not be understood as reducing ambition, but rather as a mechanism for maximizing impact. This entails identifying those actions that, based on national targets, generate the greatest benefits in terms of conservation, risk reduction, and resource mobilization and that are feasible to implement in the short and medium term. Effective implementation of this roadmap also requires a clear mapping of the stakeholders involved and recognition of their differentiated roles.



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