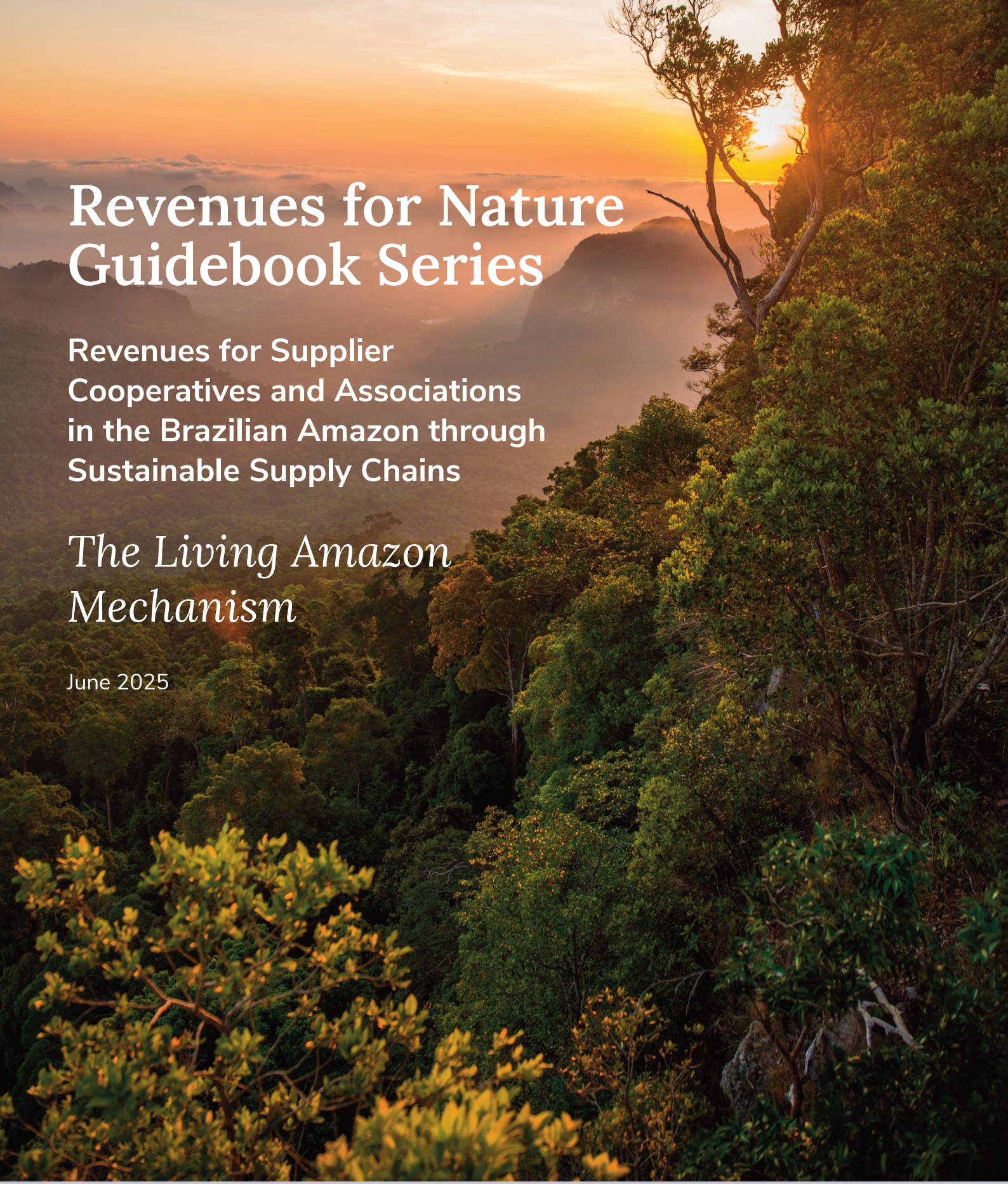


Revenues for Nature Guidebook Series

Revenues for Supplier Cooperatives and Associations in the Brazilian Amazon through Sustainable Supply Chains

The Living Amazon Mechanism

June 2025

UNDP

BIOFIN
The Biodiversity Finance Initiative

UN environment programme | finance initiative

Green Finance Institute | HIVE

greenfinanceinstitute.com/gfihive/revenues-for-nature

Revenues for Nature Project

Revenues for Nature (R4N) is a global project led by the Green Finance Institute Hive, in partnership with UNDP Biodiversity Finance Initiative (BIOFIN) and UNEP Finance Initiative (UNEP FI).

R4N aims to contribute to the achievement of Target 19 of the Kunming-Montreal Global Biodiversity Framework (GBF) by supporting countries in identifying and implementing effective models for mobilising private sector finance into nature restoration and conservation.

The project's three pillars of work include:

1. **Replication and Scaling of Models:** We work with and support an initial seven models across eight countries that have the potential to mobilise an initial USD 170 million by 2027.
2. **Partnership Building for Model Development:** We host 400+ Community Members across finance, business, government and NGOs in our Community of Practice and bring these members together to develop models and feed into a broader system change.
3. **Knowledge Sharing:** We share learnings through guidebooks, case studies, databases, newsletters, workshops, podcasts and webinars.

R4N is funded by the Gordon and Betty Moore Foundation.

Guidebook Series

The R4N Guidebook Series provides an in-depth analysis of models across the globe that unlock private sector capital into nature restoration or protection, including nature-based solutions (NbS). Each Guidebook offers detailed insights into the development of these models, the enabling conditions that allowed them to succeed, along with key lessons learned. The series examines the ecological, political, and socio-economic factors that support the replicability and scalability of these models in diverse regions, and explores how these models can generate revenue and improve biodiversity while leveraging some private sector financing.

The R4N Guidebook Series currently include:

- Biodiversity Net Gain, England – October 2024
- Wetland Mitigation and Endangered Species Habitat Banking, United States – October 2024
- Habitat Banks, Colombia – October 2024
- Nature-based Models for Unlocking Private Investment into Water Quality and Availability, Part 1 – October 2024

The next publications of the R4N Guidebook Series will be released in the first half of 2025.

The Guidebook Series is aimed at policymakers, corporates and investors who are interested in scaling high-integrity models to mobilise private sector capital at scale into conservation and nature-positive outcomes.

About this Guidebook

The Revenues for supplier cooperatives and associations in the Brazilian Amazon Through Sustainable Supply Chains guidebook showcases the Living Amazon Mechanism (LAM), a pioneering innovative finance approach that channels commercial and concessional capital into socio-biodiversity value chains across the Brazilian Amazon. At its heart, the LAM pairs a streamlined credit facility with a long-term technical assistance program to fortify sustainable supply chains for non-timber forest products (NTFPs), directly empowering local socio-biodiversity supplier cooperatives, associations and family farmers.

The guidebook unpacks the LAM's value proposition, financial architecture, governance model and monitoring framework, weaving in insights from the 2023–2024 pilot. Readers will discover the operational challenges that arose, the key lessons learned, and a set of actionable recommendations to replicate and scale the LAM in new territories.

It also maps the critical market, policy and institutional enablers that underpin successful socio-biodiversity investment. Designed for corporate sustainability teams, investors, and policymakers, this guidebook presents how the LAM can be expanded within the Amazon, as well as exploring how it can serve as an example for mobilizing investments in nature-based solutions elsewhere, to deliver on Target 19 of the Kunming–Montreal Global Biodiversity Framework while driving inclusive, nature-positive development.

Acknowledgements

The lead authors of this Guidebook are Ana Toimil, Aurelia Blin, Guilherme Chéquer Luz Menezes, Katy Baker and Paula Peirão (UNEP Finance Initiative).

Reviewers of this Guidebook include Jessica Smith, Romie Goedicke den Hertog (UNEP Finance Initiative); Helen Avery, Amy Allan, Clodagh Douglas (Green Finance Initiative); Gaurav Gupta, Aurora Audino (UNDP Biodiversity Finance Initiative (BIOFIN)).

We extend our appreciation to Natura, VERT, and FUNBIO, whose inputs were instrumental in the preparation of this guidebook.

About

GFI: The Green Finance Institute (GFI) is at the forefront of shaping how finance can be used to facilitate the transition to a net-zero and nature-positive economy. It creates the enabling environments and financial solutions needed to accelerate this transition. GFI tests, demonstrates, and scales financial solutions across sectors and geographies, with a tenacious focus on practical outcomes. Often, this involves operationalizing pioneering concepts and breaking down barriers to action to ensure capital moves effectively between counterparties. Its aim is to fill the execution gap by ensuring that capital flows to the initiatives that make the biggest difference to the real economy.

UNDP BIOFIN: United Nations Development Programme (UNDP) is the leading United Nations organization in the fight against the injustice of poverty, inequality and climate change. Working with our broad network of experts and partners in 170 countries, we help nations develop integrated, lasting solutions for people and the planet. Learn more at undp.org or follow us @undp. The Biodiversity Finance Initiative (BIOFIN) was launched in 2012 and supports over 130 countries to design and implement national biodiversity finance plans.

UNEP FI: United Nations Environment Programme Finance Initiative (UNEP FI) brings together a global network of banks, insurers, and investors to catalyze the transition to more sustainable economies. The initiative has been connecting the UN with financial institutions worldwide to help shape the sustainable finance agenda for more than 30 years. UNEP FI provides practical guidance and tools to more than 500 banks and insurers that are individually implementing the Principles for Responsible Banking and Principles for Sustainable Insurance on a voluntary basis. Financial institutions work with UNEP FI to advance responsible banking and sustainable insurance to support clients and customers position their businesses for the transition to a sustainable and inclusive economy.

Contents

Executive Summary

The **Living Amazon Mechanism (LAM)** is an innovative finance model aimed at fostering conservation and regeneration-driven development in the Amazon. It comprises two complementary instruments: the Certificate of Agribusiness Receivables (CRA), a debt mechanism that provides credit to local socio-biodiversity supplier cooperatives and associations, and the Enabling Conditions Facility (ECF), which directs philanthropic resources to address barriers, such as institutional and productive shortcomings hindering the development of socio-biodiversity supply chains in the Amazon and primarily providing technical assistance on a variety of topics. Together, these instruments seek to strengthen socio-biodiversity supply chains and promote sustainable livelihoods alongside forest conservation and regeneration.

Since its pilot launch in December 2023, the LAM has engaged 15 cooperatives and associations in four states on the Brazilian Amazon: Pará, Amazonas, Amapá and Rondônia.[1] This initiative plans to benefit over 10,000 families and aims to contribute to the conservation of three million hectares of forest. Proposed by Natura Cosmetics S.A., a leading Brazilian cosmetics company, in partnership with VERT Capital, a Brazilian financial services firm specialized in structured finance and securitization; Violet, a financial advisory firm focused on sustainable and climate finance; and The Brazilian Biodiversity Fund (FUNBIO), the LAM has leveraged concessional and commercial investments to support non-timber forest products (NTFPs) supply chains. This aligns with Brazil's commitments to the Global Biodiversity Framework (GBF), particularly Target 19, which focuses on closing the financing gap for biodiversity conservation.

The LAM's unique value proposition lies in its capacity to combine advanced financing at competitive interest rates for annual crops with technical assistance that addresses other barriers faced in socio-biodiversity supply chains, while off-takers (currently Natura) ensure direct connection to the market. This dual approach not only strengthens organizational and operational capacity but also enhances the production capacity and resilience of Amazonian communities. The resulting impact includes increased

[1] Figure as of December 2024.

NTFP production, higher average family incomes, and expanded areas of protected and regenerated forest, reinforcing the model's potential to address both social and environmental challenges. With its scalable and replicable design, the LAM offers a pathway for developing forest-compatible bioeconomies globally. By integrating income generation with conservation, it represents a significant step toward nature recovery and sustainable development. Its success in unlocking private capital and building resilient and mature communities underscores its potential as a benchmark model for other regions facing similar challenges.

The design of the Mechanism acknowledges several barriers to developing a thriving bioeconomy in the Amazon, including a lack of working capital for bioeconomic activities. This shortage is largely due to the region's structural complexities and the negative experiences that community enterprises have previously faced when accessing credit.

The success of the LAM provides insights for scaling and replicating the model. One of the foremost lessons is the importance of anchoring the mechanism with a strong off-taker from the outset. Securing a market actor like Natura, willing to commit to long-term sourcing agreements and act as a first-loss investor, helps align financial incentives with sustainability goals, reduces investor risk, and stabilizes demand for forest-compatible products.

Equally important is the deep engagement with local communities. Effective nature-based solutions (NbS) depend on local knowledge, trust, and participation. Natura's long-standing relationships in the Amazon have proven essential in fostering community buy-in, enabling implementation that reflects local realities, and ensuring that the benefits of investment reach the people managing and conserving the forest.

Another key factor for the mechanism's success lies in technical assistance. Community-based organizations require more than capital; they need enhanced capacities and systems to manage it effectively. The ECF addresses this need by providing tailored support to improve financial governance, strengthen supply chains, and build long-term resilience among cooperatives and associations.

The LAM also demonstrates the value of blended finance strategically combining philanthropic, concessional and commercial resources: philanthropic capital (grants) assigned to the ECF provide technical assistance, while other types of concessional and commercial capital are going to the CRA to finance annual crops. This structure not only reduces risks and improves investability of small-scale community activities but also supports foundational activities like capacity building and engagement that are essential but not immediately revenue-generating.

Institutional design also matters. The LAM's single governance structure that integrates both financial (the CRA) and technical components (the ECF) and includes diverse stakeholders - particularly from the territories involved - ensures transparency, accountability, and responsiveness to evolving needs. Inclusive governance strengthens legitimacy and supports long-term alignment between partners. Finally, enabling public environment is essential to scale and sustain mechanisms like the LAM. Creating favorable conditions for private capital to flow toward conservation-linked production models is key to unlocking wider transformation.

Together, these elements form a practical, scalable, and replicable framework that can be adopted by other corporations and local socio-biodiversity supplier organizations to mobilize capital for conservation, empower local communities, and build sustainable economies in ecologically critical regions.

Part 1: The Living Amazon Mechanism

This section outlines the Living Amazon Mechanism, detailing its origins, expected impact, design and functionality. It also examines the associated financial instruments, governance structures, technical assistance facility, and provides a roadmap for future development.

Genesis: Origins, Partners, and Pilot Phase

Natura first proposed the Living Amazon Mechanism (LAM) to the Global Innovation Lab for Climate Finance in 2021 to halt the conversion of native forest and shore up socio-biodiversity supply chains of non timber forest products in the Amazon. Founded in Brazil in 1969, Natura is a Brazilian multinational in the hygiene and cosmetics industry. For more than twenty years, the company has championed a conservation-based economy in the Amazon, working hand-in-hand with local communities to promote both environmental protection and socio-economic well-being.

To pilot the LAM, Natura joined forces with the Brazilian Biodiversity Fund (FUNBIO) and VERT in 2022. FUNBIO, a private, non-profit financial mechanism established in 1996, is the only non-governmental entity in the Southern Hemisphere accredited by both the Global Environment Facility and the Green Climate Fund. Since its founding, FUNBIO has managed over USD 1 billion, supporting approximately 702 non-reimbursable projects, benefiting more than 400 institutions and 506 legally protected areas, covering over 170 million hectares across all Brazilian biomes. VERT, founded in 2016 by pioneers of Brazil's Agribusiness Receivables Certificate (CRA) market, is one of the country's largest securitization firms. In 2021 alone it structured five of Brazil's seven social bonds, and to date has completed over 300 transactions, issuing over USD 14 billion (over BRL 80 billion) and raised capital from over 100 institutional investors. Under the LAM, VERT manages the CRA issuance while FUNBIO administers the Enabling Conditions Facility (ECF).

The LAM aims to operate across 16 territories in the Amazon Region where Natura collaborates with 44 socio-biodiversity supplier cooperatives associations. Through this network, the LAM has the potential to support over 10,000 families and contribute to safeguarding three million hectares of forest in collaboration with local communities and organizations.

The pilot phase of the LAM, launched in December 2023, was set to run until the end of 2024. For its launch, the LAM raised BRL 9.2 million (approximately USD 1.6 million), maintaining this amount for both financial activities and the ECF (Valor Econômico, 2024). As of April 2024, 13 cooperatives had already benefited from the mechanism, accessing approximately BRL 6 million (USD 1.06 million) in credit with pre-fixed interest rate of 8% per year at the time (below market rates) and receiving capacity building in financial management with funding from the ECF (almost BRL 1 million).

Table 1. Timeline for Living Amazon Mechanism

2021	Natura proposes the LAM to the Global Innovation Lab for Climate Finance
2022	Natura partners with FUNBIO and VERT to pilot the LAM
Dec 2023	Official launch of the LAM pilot phase
Apr 2024	13 cooperatives receive financing under the LAM
End of 2024	Planned conclusion of LAM pilot phase
Dec 2026	Maturity of inaugural CRA (36-month tenor from Dec 2023)

A Socio-Bioeconomy Model for Forests Conservation and Equity

The Amazon's NTFP sector has long been sidelined by investor preferences for large ticket sizes and perceptions of high risk. In 2021, weak environmental commitments drove a surge in deforestation and delayed international funding, exemplified by the Amazon Fund's stalled replenishment (Reuters, 2023). Meanwhile, infrastructure deficits, tenure insecurity, market isolation and workforce shortages further inflate costs and deter capital (UNEP, TNC and TFA 2024, 20; USAID, 2024, 19–20).

Nationally, Brazil's 2024 G20 presidency elevated the bioeconomy agenda, urging major economies to integrate sustainability with development (NatureFinance 2024, 4). Yet over 83% of Amazon deforestation is driven by demand for livestock, grains and mining, with farms under 300 ha accounting for more than 40% of forest loss (UNEP, TNC and TFA 2024, 4). By channeling tailored finance, assured markets and embedded capacity-building into community-led NTFP value chains, the LAM offers a viable alternative, demonstrating that sustainable livelihoods and forest preservation can grow hand in hand. The LAM is a purpose-built socio-bioeconomy model that aligns forest conservation with inclusive rural development by strengthening value chains for non-timber forest products (NTFPs) – such as açaí, Brazil nuts and andiroba.

Ultimately, the LAM proves that a well-crafted socio-bioeconomy model – grounded in local leadership, innovative finance and market alignment – can de-risk community-scale NbS, catalyze private investment and unlock inclusive, scalable pathways for conservation and development across the Amazon Basin.

How the LAM Works: Financial Instruments and Governance

Financial Instruments

The mechanism integrates two complementary financial instruments:

1. **CRA:** A Debt Mechanism called the Certificate of Agribusiness Receivables (CRA) to provide credit to local supplier cooperatives and associations, allowing them to access financing based on the future revenue of their sustainable activities. The CRA channels concessional and commercial capital to the socio-biodiversity supplier cooperatives and associations by securitizing receivables linked to agricultural products.
2. **ECF:** A technical assistance facility called the Enabling Conditions Facility (ECF) to direct philanthropic resources to strengthen institutional and operational capacities of these cooperatives and associations, as well as climate, forest, biodiversity and decent living local initiatives connected to socio-biodiversity supply chains and their territories.

These two instruments are aligned under the same governance process, aiming to strengthen socio-biodiversity organizations, businesses, and supply chains in the Amazon.

The Certificate of Agribusiness Receivables

The Certificate of Agribusiness Receivables (CRA) represents credits originating from agricultural activities. They are a popular investment instrument in Brazil, primarily used for commodity-linked investments, such as soy.

What are they?

The CRA is a fixed-income security – a type of investment in which funds are lent to an entity, such as an organization or government, in exchange for the repayment of the principal amount along with regular interest payments. It is backed by receivables (i.e., rights to future cash flows) originating from agribusiness commercial transactions, such as the sale of agricultural products. The CRA enables producers or companies to convert future revenues into immediate liquidity when needed.
For instance, a farmer may require capital upfront to plant and harvest crops but will only receive payment months later, after the harvest is sold to a supermarket or other company that has committed to purchasing the produce (the off-taker). The right to receive this future payment is referred to as a "receivable." These receivables can be bundled into a CRA, transforming often small-scale, localized transactions into an investable asset. This asset is sold to investors who provide capital in the present, in return for repayment with interest, using the funds generated from the eventual sale of the agricultural products. In this way, producers can access financing when needed and repay it over time with an agreed-upon interest.

Who invests and why?

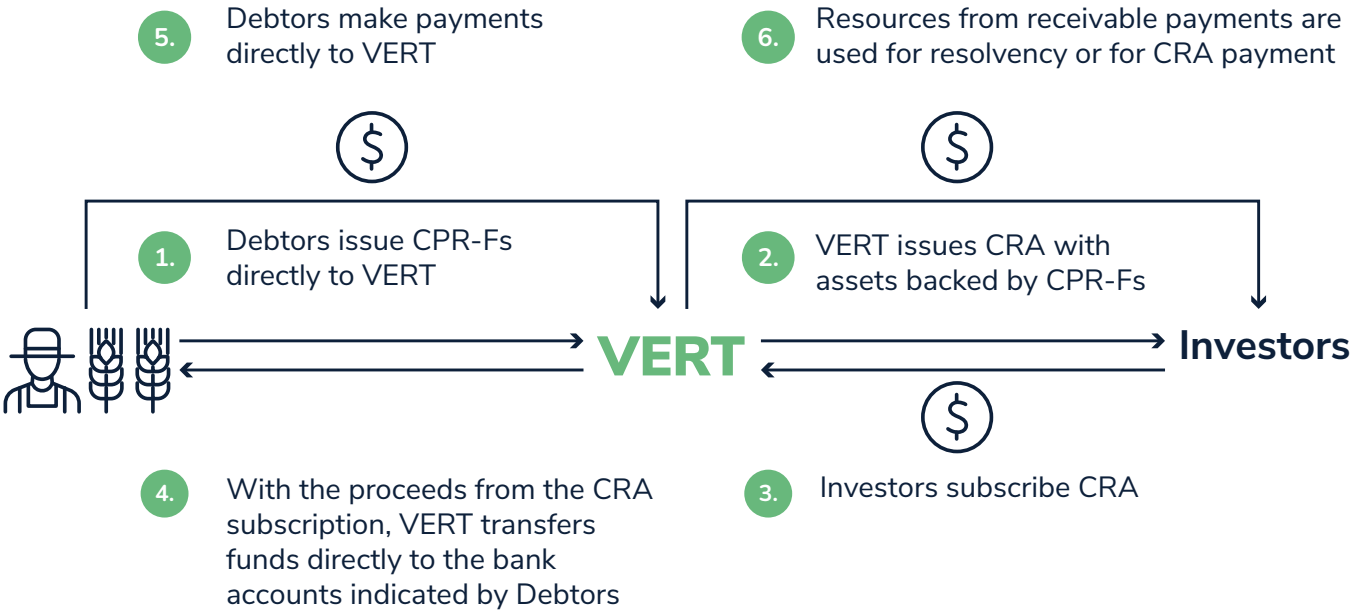
CRAs, like other investment mechanisms, poses potential risks like debtor default (which can be mitigated through diversification and guarantees), low liquidity, and the complexity of understanding the risks inherent to this unique structure. However, there are several benefits which make the CRA a popular investment in Brazil. Among its advantages, the CRA allows portfolio diversification through agricultural assets, along with tax exemption benefits for certain investor profiles.

In the first half of 2024, for example, CRA issuances more than tripled over five years, reaching BRL 23.32 billion (USD 4.1 billion) (Pasquale, 2024). This growth is partly driven by rising investor interest in agricultural debt instruments, as well as favorable tax incentives (tax exemptions) for retail investors.

How are they structured?

In Brazil, only companies organized as “securitization companies” are authorized to issue CRAs. They are responsible for packaging the credits into a fixed-income security that will be made available on the capital market. For this mechanism, VERT acts as the securitization company managing the CRA.

Figure 1. Outline of how a typical CRA functions



In addition to the underlying asset, a series of risk analyses and eligibility criteria are applied to minimize credit risk. These include evaluating historical credit performance, applying eligibility criteria, and establishing specific triggers to limit losses. Additional safeguards may also support this structure, such as subordination within the capital structure to absorb initial losses, guarantees, insurance, and excess spread (VERT, 2024).

Adapting CRAs to the Living Amazon Mechanism

The LAM was one of the first CRAs linked to traditional communities in the Amazon, marking an important innovation. This structure not only brings a new investment model to the sector but also demonstrates that ESG investments can leverage standard market instruments. In the context of the LAM, the CRA instrument provides advance financing to socio-biodiversity supplier cooperatives and associations supported by Agribusiness Credits.

The CRA in the LAM is backed by Rural Producer Banknotes (CPRs), which are banknotes with financial settlement issued electronically by debtors and a formal promise made by the local producers to pay back. The beneficiaries of the CRA financing, consisting of formally established associations or cooperatives in the Amazon, typically represent 50 to 300 families. Most of these organizations have no previous experience with CRA-based financing.

In CRAs involving an off-taker, the off-taker usually only acts as a buyer. A unique feature of this Mechanism is the introduction of Natura as both a buyer – major off-taker purchasing inputs from local communities – and as an investor, providing philanthropic capital for the ECF. The financing from the CRA supports a variety of harvests, including andiroba, cupuaçu, murumuru, ucuúba, tucumã, patauá, storax, açaí, chestnut, pataqueira, capitiú and priprioca. Depending on the degree of local value-added, these species may yield raw materials (e.g., fruits or plants), semi-processed products (e.g., seeds), or processed goods (such as oils, butters, and extracts).

The initial CRA is designed to allocate 80-90% of its funds for advance financing and working capital for prioritized cooperatives and associations, with the possibility of 10-20% directed toward longer-term capital expenditures. Working capital is generally structured to match harvest cycles. To enable effective prepayment, the supplier would ideally receive an advance of up to 100% of the amount foreseen to be purchased by Natura by the end of the annual crop. This timing provides cooperatives with sufficient working capital at the start of the harvest cycle, allowing them to explore new sourcing areas, to pay producers in cash, and cover minor costs, such as transport and packaging.

Longer-term capital expenditures will be structured to align with the CRA's three-year term. Each CRA series is intended to last three years, introducing the concept of revolving underlying assets. This approach allows for the acquisition of new credit rights using funds generated from previous credit rights, meaning the same cooperative can access working capital for each harvest season over three consecutive years, provided it remains in good standing with the program and meets the LAM's eligibility criteria.

The Mechanism's competitive advantage over other financing options lies in its ability to provide advanced financing at competitive interest rates with simplified procedures compared to alternative credit sources. For this CRA, two key documents are required from the debtor to secure the underlying asset: the Rural Product Note (CPRF) and the CRA Adhesion Agreement. The content and format of these documents, along with the registration forms for cooperatives and associations with VERT, were specifically tailored to fit community business needs. Recognizing that complex and lengthy documentation often restricts credit access, the standard 40-page documents have been reduced to fewer than 10 pages, greatly facilitating community members' understanding of the Mechanism.

Lastly, the capital structure of this Mechanism is designed to include subordinate, mezzanine and senior tranches. Off-takers and concessional investors participate in the subordinated and mezzanine tranches, while commercial investors are involved in the senior tranche. In the event of defaults, the subordinated tranche will bear the first losses.

In this framework, Natura acts as both an off-taker and an investor in the subordinated tranche, aligning interests and mitigating risks, which may help attract additional investors. Furthermore, the structure is designed to provide market returns on the senior tranche, ensuring both commercial viability and scalability.

The LAM considers to craft other financial instruments in the future to allocate funds towards longer-term capital expenditure alongside the CRA, continuing to serve the need for working capital. This future expansion is intended to support the long-term development of cooperative businesses. Additionally, the inclusion of the ECF enhances the Mechanism's competitiveness relative to other credit proposals.

The Enabling Conditions Facility

The technical assistance facility, known as the "ECF" that accompanies the CRA, aims to address historical barriers that have hindered the development of socio-biodiversity supply chains in the Amazon.

The ECF operates through an operational investment plan, developed in consultation with supplier cooperatives and associations, relevant local actors, and interested off-takers.

This investment plan is designed to assist the Program's decision-making bodies in targeting fundraising efforts, resources, and actions to support Amazonian cooperatives and associations and their respective territories. It outlines the instrument's investment strategy and details the specific programs in which the instrument will invest. Each program will include clear objectives, expected outcomes, performance indicators, criteria for selecting beneficiary organizations, a timeline, and a budget based on a thorough baseline assessment.

The ECF consists of three core programmatic areas:

1. **Amazon Socio-Bioeconomy:** Focuses on supplier cooperatives and associations' institutional and productive strengthening through improved planning and management, as well as capacity building. It includes the implementation of regenerative practices for the processing and value addition to native products and market access strategies, aiming at boosting incomes while preserving socio-biodiversity and enhancing community autonomy.
2. **Climate and Nature:** Promotes agroecological practices and agroforestry systems that enable agricultural diversification with native species for economic and environmental benefits. It also supports the structuring of payments for ecosystem services schemes and invests in forest conservation and restoration for Amazonian ecosystems.
3. **Decent Living:** Promotes the well-being of communities in the Amazon through initiatives to support access to sanitation, renewable energy, and advocacy, focusing on women's empowerment and youth engagement. Entrepreneurship, as well as the preservation of local culture, are central components of this area.

Figure 2: ECF Programs and Components

1.

Amazonian Sociobioeconomy

- Institutional strengthening
- Productive strengthening
- Regenerative practices for processing and adding value
- Market access

2.

Climate and Nature

- Agroforestry systems
- Environmental Services
- Forest conservation and restoration

3.

Decent Living

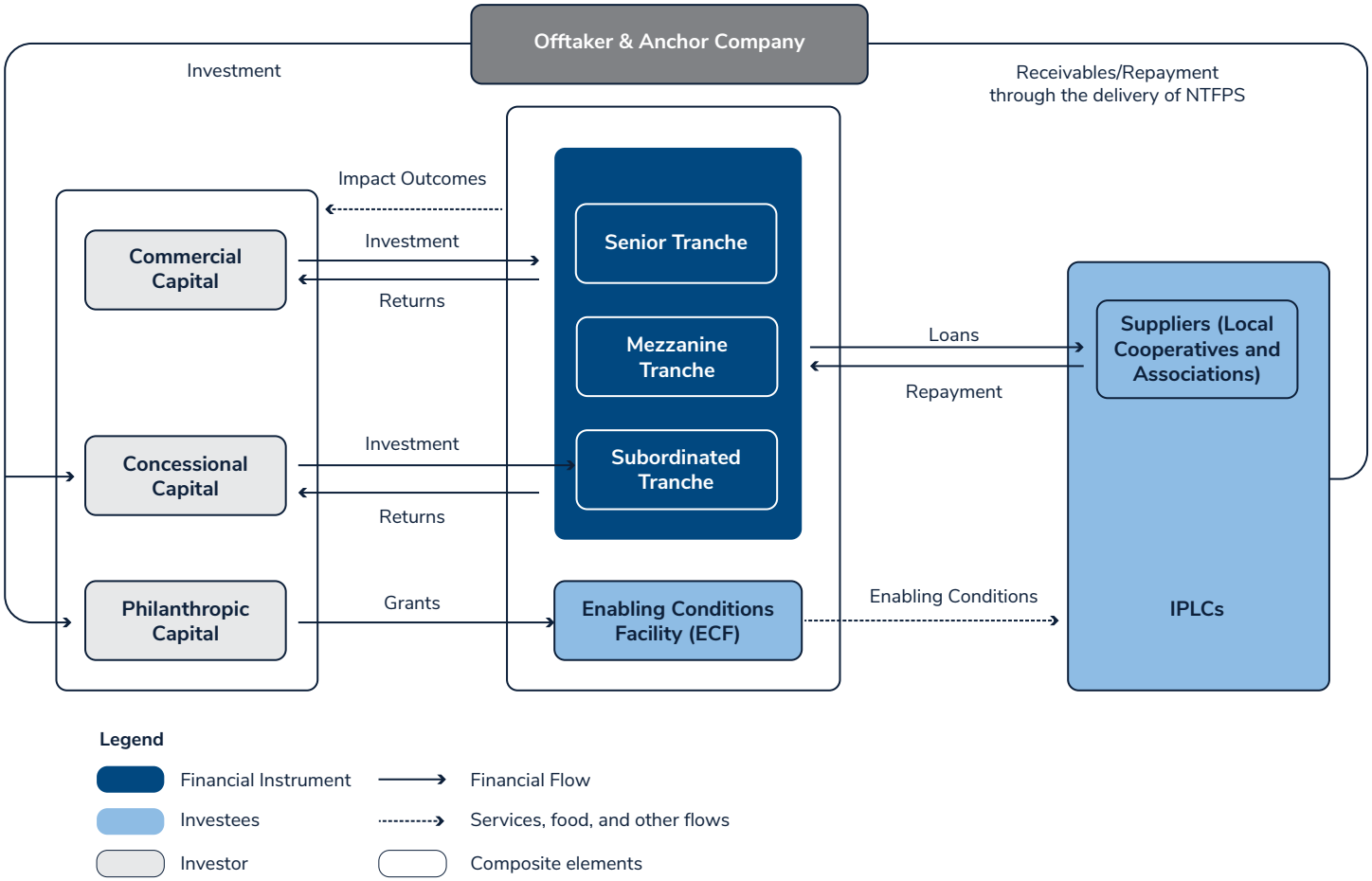
- Sustainable community infrastructure
- Citizenship and entrepreneurship education
- Gender with a focus on women
- Access to public policies
- Culture

These three programmatic areas, with their specific components, constitute a holistic approach that, in addition to fostering economic development, aims to ensure environmental sustainability and well-being, addressing the unique challenges faced by Amazonian communities.

The ECF will act as the executing agency for plans aligned with the priority actions and budget approved by the Mechanism's Board (see further details in Governance), which includes representatives from local communities.

Natura's longstanding relationship with its supplier communities is fundamental to this setup, as it fosters the trust needed for effective collaboration and reinforces the commitment to structuring the Mechanism with input from these communities. While Natura and concessional investors will be the primary funders of the ECF, this trusted foundation enhances the Mechanism's capacity for sustainable impact.

Figure 3. Living Amazon Mechanism instrument mechanics.
Source: Adapted from Climate Policy Initiative (2024)



Governance

The Living Amazon Mechanism has established a comprehensive, single governance structure for the operation of both the CRAs and the ECF to ensure strong alignment in interests and long-term objectives. The inclusion of external (and regional) stakeholders in its governance enhances the Mechanism's legitimacy and strengthens its responsiveness to local needs and challenges.

The governance structure comprises:

1. An Executive Committee;
2. A Secretariat;
3. A Board
4. A Territorial Advisory Council.

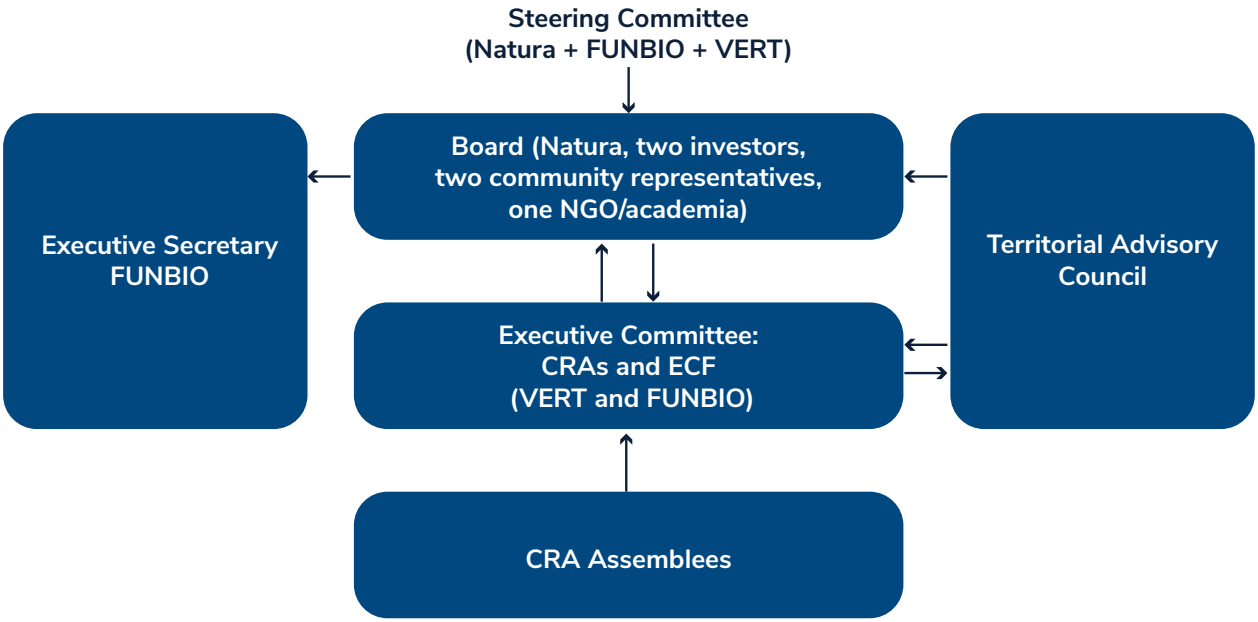
The **Executive Committee** includes representatives from ECF and CRA management, specifically FUNBIO and VERT.

The **Secretariat**, managed by FUNBIO, acts as the executing agency, implementing plans aligned with priority actions approved by the Board.

The **Board** includes Natura (the off-taker), two investors, two local community representatives, and a third-party NGO representative or academia member. Governed by its internal rules, the Board is the primary decision-making body of the LAM, with responsibilities that include analyzing, approving, and monitoring the ECF's Investment Plans and CRA's terms and conditions. It also assesses the technical and financial performance of the Mechanism, supports fundraising strategy, and steers long-term planning.

Finally, the **Territorial Advisory Council** is a non-deliberative body consisting of three representatives of local communities and off-takers (currently Natura) aiming to provide critical insights into local needs and challenges, ensuring that the LAM's decisions remain grounded in a practical understanding of the region. The Council also intends to guarantee the representation of women and youth within this participatory process. Below is a diagram illustrating the governance structure (Figure 4).

Figure 4. Governance structure of the Living Amazon Mechanism.



Approval and monitoring process

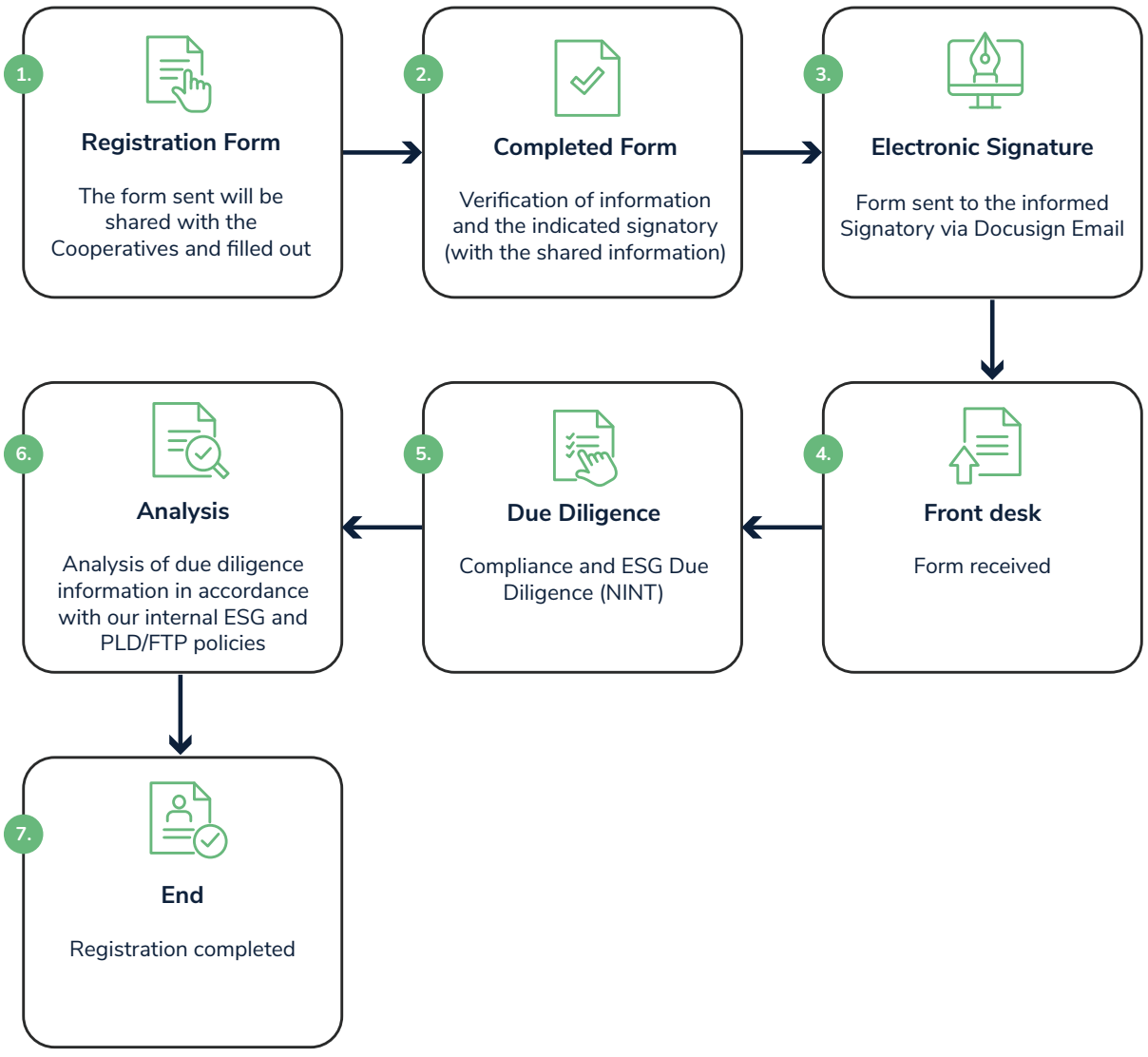
The Mechanism has a thorough approval and monitoring process as described below:

CRA

To secure the underlying asset for the CRA, debtors are required to sign two essential documents: the Rural Product Note (CPRF) and the CRA Adhesion Agreement to begin the process of accessing credit. As part of this process, potential beneficiaries must undergo a thorough, two-step screening. First, they must meet the LAM's eligibility criteria which includes meeting requirements of the fair-trade certification (UEBT[2]) adopted by Natura, followed by undertaking VERT's due diligence process. Legal and socio-environmental reviews are part of this due diligence phase, ensuring only approved debtors advance to formalization.

Once a cooperative is selected, Natura confirms it is not in default. The process is illustrated in the following diagram (Figure 5.)

Figure 5. Approval and monitoring process for securing the underlying asset for the CRA (Cadastro Grupo Vert)



[2] https://uebt.org/certification-1

Once a cooperative becomes a formal beneficiary of the CRA, a monitoring process is implemented throughout the CRA term to ensure timely payments. This process also assesses eligibility for revolving credit, should the cooperative wish to renew its credit line.

ECF

The ECF also has an established procedure for beneficiary approval and monitoring. Initially, the beneficiaries within the CRA participate in the ECF to receive technical assistance in financial management in the Amazonian socio-bioeconomy programmatic area. In the medium-term, however, the ECF aims to support additional cooperatives and associations not yet part of the CRA, creating a more supportive environment and preparing them for potential credit support from the CRA. Investments in improvement of environmental and social performance of cooperatives and associations' processing units, agroforestry systems and capacity building of youth, as well as women's empowerment are also anticipated to begin in the second year of operation.

Support from the ECF can be accessed through calls for proposals, offers for specific groups and selected projects, direct support for specific and strategic projects and direct access, when FUNBIO contracts services like consultants and acquiring goods for communities as a donation.

Measuring What Matters: Impact and Outcomes

The LAM's impact proposition centers on three primary positive impacts:

1. An increase in the productivity and total production of NFTP products;
2. Growth in the beneficiaries' average family income;
3. Contributions to forest protection.

To achieve these impacts, the two instruments of the LAM – the CRA and the ECF - will operate collaboratively aiming for several key outcomes. These include strengthened organizational and management capacity of cooperatives and associations, increased investment capacity for these organizations, added value to their products, and notable improvements in the environmental and social conditions within the local region.

Scaling Ambition: From Pilot to Regional Transformation

The NTFP market in the Amazon, where the LAM operates, remains in its infancy and is constrained by:

- **Lack of proven commercial viability at scale:** Inadequate technology, insufficient productive capacity, and weak market infrastructure preventing competition with large-scale agriculture and cattle ranching.
- **Absence of environmental pricing mechanisms:** Without financial recognition of carbon sequestration and emissions prevention, socio-biodiversity products remain undervalued.
- **Limited market integration:** The isolation of communities requires investments in transport, logistics, energy access, and regional service centers.
- **Need for capacity building:** Training in sustainable harvesting, quality control, and financial management is essential to enhance competitiveness.

A good starting point to explain the success of the LAM to date lies in examining how the Mechanism effectively integrated the key enabling factors outlined above, while simultaneously responding to persistent challenges. For example, the LAM supports the integration of NTFPs with agroforestry systems and other sustainable economic activities, and the development of small-scale processing industries to enhance value addition at the local level, promoting income diversification for producers. Similarly, its design places community engagement at its core, both as key economic actors on NTFPs value chains and as part of the Mechanism's governance structure, ensuring that the project aligns with the needs and realities of local communities. Further, the selection of the participating cooperatives is subject to legal and environmental due diligence processes to ensure compliance with relevant laws and alignment with industry good practices.

It is precisely in these contexts like the Amazon that mechanisms such as the LAM can play a transformative role. By addressing both financial and structural barriers, challenges commonly faced by remote, biodiversity-rich areas in many developing countries, the LAM demonstrates how innovative finance instruments can redirect capital toward priority regions and sustainable practices. Moreover, it shows how partnerships between local cooperatives and strong off-takers can effectively bridge market gaps and elevate local communities as both stewards of the forest and central economic actors in the development of NTFP value chains.

The Mechanism's initial operations provide a concrete example of how this model works in practice. The CRA's first issuance was designed to allocate approximately 80% of proceeds to operational costs, with the possibility of 10-20% being directed toward long-term capital expenditures. Complementing the financing component, technical assistance was delivered through the ECF to strengthen the management practices of cooperatives and associations, ensuring the effective use of CRA funds. This dual approach, financing coupled with technical capacity building, underpins the Mechanism's strategy to foster sustainable and resilient local enterprises.

The CRA will progressively secure financing through a combination of commercial and concessional capital. During the pilot phase, Natura and other two concessional investors - Fundo Vale and Good Energies Foundation - participated. For the next phase, the International Finance Corporation (IFC) has announced its engagement, marking its first direct community investment -alongside the Global Environment Facility (GEF) who has also confirmed its participation. With these institutional partners, the LAM is evolving from a small-scale pilot to a more structured initiative, establishing key institutional anchors for future expansion.

The ECF has been instrumental in providing technical assistance to cooperatives and associations, particularly in strengthening financial management. This focus was identified through consultations with cooperatives and associations supplying socio-biodiversity inputs during a workshop held in Benevides, PA, Brazil, in June 2023. Stakeholder engagement remains crucial for ensuring effective resource implementation and long-term impact. The ECF also launched a call for proposals for the improvement of process units making available USD 1 million to nine projects.

Looking ahead, the LAM aims to mobilize BRL 100 million (USD 17.7 million) over the next decade. The next phase will welcome additional participation from international financial institutions and multilateral organizations, which will strengthen the Mechanism's ability to scale and enhance market opportunities for the production of NTFPs in the region.

As more investors come on board, any potential defaults will initially be absorbed by Natura and other investors holding subordinated quotas. However, historical data shows that defaults within the off-takers' supply chain have been nearly non-existent. Over time, the Mechanism aims to scale by attracting additional off-takers in the region. As it builds a strong track record, reliance on concessional investors is expected to decrease, paving the way for greater participation from commercial investors.

Part 2:
Key Learnings and Recommendations for Expansion and Replication of the LAM

This section highlights key challenges encountered during the structuring and initial phases of the Mechanism, and the key learnings from the pilot, emphasizing community engagement, financial management, catalytic capital access, the importance of governance, the inclusion of gender and youth perspectives, and the need for robust data collection to ensure long-term sustainability and scalability of the LAM. It also describes the essential recommendations and strategies for successfully scaling and replicating the LAM.

Lessons from the Field: Insights for Scaling and Replication

During the structuring and development phase, followed by the initial pilot phase, a series of challenges provided valuable insights that enhanced the design and implementation of the mechanism. Key highlights from this process include:

1. Beneficiaries' financial management and governance capacity

Despite efforts to adapt and simplify required financial documentation, project beneficiaries still faced certain challenges to fully understand requirements and access available funds. Partners are now working on how to further simplify processes and documentation for the next phases of the Mechanism. Additionally, challenges arose during the application and qualification process for cooperatives and associations due to limited quality financial records, highlighting the importance of technical assistance to improve organisational maturity level of socio-biodiversity community businesses.

Moreover, there is an added challenge for pipeline development of the LAM in a scaled environment. There are a series of cooperatives which are still not entirely ready to become beneficiaries of the CRA, therefore, there is work to be done in the enabling conditions to guarantee a strong pipeline in the years to come. To address these issues, the ECF is actively working to enhance access to, and effective use of, credit by strengthening the financial management and governance of cooperatives. This involves supporting credit utilization planning, implementing a financial management system, improving management and governance routines, and facilitating participatory drafting of financial management guides for each organisation.

A second round of consultations with cooperatives and associations that supply socio-biodiversity inputs was held during a workshop in Benevides, PA, Brazil in June 2024. During this consultation, additional needs were discussed, such as the importance of succession planning and further training in financial management practices. Gender was another important topic of discussion, emphasizing the need to better prepare women for leadership and succession roles. These consultations reinforced the value of participatory engagement in tailoring support for local needs. These efforts underscore the critical role of the ECF within the Mechanism in ensuring the long-term financial sustainability of beneficiaries and promoting local sustainable development in the region.

2. Long process for accessing catalytic capital and other potential international investors
The lengthy and cumbersome processes associated with accessing catalytic capital have long been identified as a barrier to the scalability of NbS. From initial discussions and signing non-disclosure agreements, to establishing binding agreements, these processes can span multiple years. This delay is particularly concerning given the necessity for concessional capital to develop and implement such mechanisms, coupled with the constrained timeframe required for capital deployment due to local harvest seasons. Such factors can significantly hinder the success of these initiatives.

Further barriers include the nature and region of the investment, which still lacks a strong track record for international investors, as well as the lack of understanding of local mechanisms such as the CRA, which is a local asset backed security.

However, recognizing these challenges and adopting a phased approach has proven effective in minimizing disruptions during the rollout process and aiding in creating a track record for the Mechanism. Further investor engagement and capacity building is needed to better understand local market conditions, regional conditions as well as the details of community investment in the Amazon region. Securing philanthropic capital has also become increasingly challenging for the LAM, as investors show a growing preference for financing revenue-generating activities under the CRA. While the CRA has allowed the LAM to attract private capital, the Mechanism's reliance on philanthropic funding remains essential for covering foundational, non-revenue-generating activities, such as community engagement, capacity building, and other foundational investments to enhance socio-bioeconomy in the Amazon. These activities are crucial for the LAM's long-term success, as they ensure local communities are equipped to participate in and benefit from NbS initiatives.

3. Multi-partner Mechanism, complex governance structure and working with stakeholders
The creation of the Mechanism, which involves a multi-stakeholder partnership, presents its own challenges. Managing multiple stakeholders within a single financial vehicle often necessitates intricate governance structures, which can lead to lengthy processes and impact implementation timelines. Additionally, fostering local connections and partnerships for the implementation of these vehicles can add another layer of complexity.

Conversely, this governance structure can help ensure legitimacy for the Mechanism, as it ensures that the different actors' voices are heard; that priority areas are identified, and actions are targeted accordingly; and that the necessary adjustments during implementation are undertaken based on ongoing feedback and engagement with participants. Thus, finding a balance within these complex structures is crucial for scaling and replicating such initiatives effectively.

A guiding principle of the LAM is that the Mechanism operates with communities, and not simply for them. This participatory approach recognizes that local communities are not just beneficiaries but active collaborators in the design, decision-making, and implementation of NbS initiatives. By involving communities in the governance structure of the Mechanism, the LAM ensures that local knowledge, cultural values, and practical needs are woven into the core of its operations. This co-management model promotes transparency and fosters trust, empowering communities to shape projects that directly impact their lives, which is essential for the long-term sustainability and resilience of the Mechanism.

An inclusive governance approach within the LAM also emphasizes bringing youth and gender perspectives into the process. The LAM recognizes that women play a vital role in their communities and in conservation efforts, and it ensures that gender equity is observed in the Mechanism's governance bodies (GEF-8 PIF, 2023, 25). In addition, the LAM will develop a Gender Action Plan to promote Gender Equity particularly in the LAM's general procedures and tools (e.g. communications guidelines, reporting templates and ToRs) but also in initiatives supported by the ECF. Similarly, through continuous engagement with the cooperatives and associations, both through its governance structure and as part of the ECF work, the LAM has identified that engaging young people is crucial for the succession planning of cooperatives and other community-led initiatives. This is because this demographic is the future custodian of sustainable practices within the Amazon, allowing the LAM to foster new leaders who are both committed to and well-versed in NbS, ensuring continuity and innovation in cooperative governance. To respond to this need, the LAM is further exploring how to improve youth participation in trainings, decision-making, monitoring and evaluation and access to knowledge. Within the ECF, a pilot capacity building program focused on young people and succession planning of cooperatives is anticipated to be launched in 2025. The program will focus on sustainable management practices, circularity and seek to promote gender equity between participants. In terms of governance, the Territorial Advisory Council will prioritize young representatives from communities. In this way, the LAM promotes balanced decision-making that addresses diverse needs, contributing to more resilient and equitable outcomes. This inclusive model strengthens community ownership and helps create a sustainable, intergenerational approach to conservation and socio-economic development in the Amazon.

4. Expanding corporate engagement and participation in the LAM

Expanding corporate engagement to attract large companies like Natura operating in the Amazon requires aligning their mission with the LAM's nature-based goals and demonstrating the long-term economic, social, and reputational benefits of supporting sustainable practices.

However, many corporations remain focused on short-term returns or may be unfamiliar with the socio-bioeconomy approach promoted by the LAM. To overcome this, a strong value proposition is essential - one that clearly illustrates how NbS can enhance a company's sustainability profile while delivering tangible environmental and social benefits, ultimately securing their buy-in.

5. Monitoring, Data Collection and Standardisation

The pilot phase of the LAM identified data collection and standardization as important elements for the successful implementation of the Mechanism. Capturing detailed technical and financial data from beneficiaries is essential for the Mechanism's scalability.

This data forms the foundation for assessing the viability and impact of NbS projects; however, it is often fragmented, stored in disparate systems, and lacks a standardized format.

6. Tailoring Financial Products to Local Needs

Access to credit remains a barrier for local communities pursuing sustainable practices in the Amazon. While public initiatives such as PRONAF provide subsidized rural credit to smallholders, only a small share reaches the Amazon. In 2021, PRONAF allocated BRL 33 billion (~USD 5.77 billion) in subsidized credit, yet only BRL 2 billion (~USD 350 million) was directed to the Amazon. Of that, less than 3%, around BRL 55 million, supported sustainable production (Conexsus, 2021, 21; CPI, 2020, 19). Encouragingly, sustainable agriculture funding has been increasing. The 2024–2025 PRONAF budget reached a record BRL 76 billion (~ USD 13 billion), marking a 43.3% rise from 2022–2023 and a 6.2% increase over the previous year. This expanded budget includes incentives for agroforestry and NTFP production, such as lower interest rates (3%), longer repayment periods (of up to 20 years), and technical assistance (Ministério do Desenvolvimento Agrário e Agricultura Familiar, 2024).

This public funding is not enough to meet the credit demands in the region. Only 15% of smallholders meet the criteria for subsidized loans (UNEP, TNC and TFA, 2024, 5). Even among eligible applicants, limited understanding of loan conditions and weak technical capacity often lead to inefficient credit use and elevated default risks. Local communities engaged in sustainable forest product harvesting face additional barriers due to the absence of financial products tailored to their realities.

One of the most persistent gaps lies in the lack of technical assistance. Many communities lack the support needed to adopt and implement sustainable practices, which constrains their ability to compete in value chains. Access to specialized knowledge in sustainability, agroforestry, and resource management is essential to boost the competitiveness of local communities' products in both local and global markets.

This is where the LAM plays a transformative role. A key innovation of the LAM lies in its ability to tailor financial instruments to local realities and can serve as a complement to government efforts such as the subsidized rural credit program. Moreover, the CRA, a debt instrument well understood by local investors and aligned with the rural economic cycle, offers cooperatives favorable financing terms in relation to mainstream working capital and agricultural financing. It considers the timing of harvests and the lack of traditional collateral among smallholders engaged in socio-bioeconomic activities.

Critically, the LAM also integrates finance with technical assistance. Through the ECF, the Mechanism delivers financial literacy, capacity building, and sustainable resource management support to early-stage NbS enterprises, including cooperatives producing NTFPs. By doing so, the LAM demonstrates that building financial resilience among local communities requires more than access to capital; it demands a holistic approach. By combining accessible, context-relevant financial products with long-term technical support, the LAM helps overcome entrenched credit barriers and lays the groundwork for a conservation-oriented bioeconomy in the Amazon (UNEP, TNC and TFA, 2024, p. 5).

The LAM Model: What it Takes to Scale and Replicate with Impact

Key considerations across seven areas, focusing on the development of effective frameworks, partnerships, and processes to ensure long-term impact, sustainability, and replicability of the mechanism in other regions are as follows:

1. Anchor success with a strong off-taker from day one

Establishing a strong off-taker from the outset is essential for the success of the Mechanism as it helps create a stable demand for NTFPs produced by the cooperatives. In turn, this provides additional assurance to investors that these cooperatives will have revenues to repay the credit obtained via the CRA. Thus, the strategic use of offtake agreements and commercial relationships, particularly anchored by a major company, facilitates financing for sustainable ingredients sourced from the Brazilian Amazon.

What sets this Mechanism apart from others is its direct connection to market development through off-taker agreements that, by creating a stable demand for socio-biodiversity products, encourages cooperatives and associations to undertake long-term commitments and investments in the sustainable production and management of the Amazon, crucial for ensuring sustainability and achieving anticipated long-term impacts. This alignment between the financial mechanisms, and the tangible needs of off-takers further shows that creating a virtuous circle from assigning credit to access to markets is a key differentiator of the LAM.

In addition to acting as an off-taker, Natura also provides philanthropic capital through the ECF and serves as a first-loss investor of concessional capital (subordinated tranche), absorbing the losses should the cooperatives default on repayment of credits obtained via the CRAs/VERT. This reduces the risk for commercial capital in the senior tranche of the Receivables Fund, thereby catalyzing capital that may not have otherwise been invested by other actors. Natura's dual role ensures strong alignment of incentives; as an off-taker, it is committed to purchasing NTFPs, helping create stable demand for forest-compatible products, while simultaneously serving as a first-loss investor with a financial interest in the success of the Mechanism, increasing the likelihood of effective implementation and reassures other investors. Natura's involvement is expected to act as a catalyst, encouraging the participation of other stakeholders, including additional off-takers who can invest in both the Receivables Fund and the ECF, reducing reliance on concessional capital and creating a self-sustaining model for bioeconomy initiatives.

In the medium-term, the Mechanism aims to scale by attracting other off-takers. This strategic diversification will enhance the Mechanism's impact and further support local communities in the Amazon, while Natura's dual role is essential in de-risking the investment and reassuring market participants that the project is viable and backed by a serious commitment to sustainable sourcing in the region.

2. Harness local knowledge and foster engagement for effective NbS

Developing effective NbS requires a deep understanding of local conditions, and thus, local communities' participation is essential to ensuring that interventions seeking to develop socio-bioeconomy chains, such as those involving NTFPs in the Amazon, are appropriate and sustainable.

Unlike monoculture practices, socio-biodiversity production chains are characterized by a wide variety of products, with over 40 types of biome-specific products, facilitated by the Amazon's biodiversity and social diversity of local communities (TNC, IDB, Natura, 2021b, 5). Local communities' deep knowledge of local biodiversity, harvesting cycles, and ecosystem dynamics is fundamental in identifying viable products and their responsible management. This traditional knowledge underpins the very existence of socio-biodiversity chains, guiding sustainable extraction practices and helping maintain forest integrity. Local communities' involvement in co-designing and monitoring of these interventions also promotes equitable benefit-sharing and cultural alignment, enhancing their legitimacy and long-term successes.

In complex environments like the Amazon, it is essential to develop locally rooted partnerships investing significant time and resources to build trust, navigate cultural sensitivities, and understand local economic conditions. This involves identifying, engaging, and retaining key beneficiaries and stakeholders (CPI, 2024, 31). This local connection is critical for the success of the LAM and can be replicated by other organizations through long-term community engagement and partnerships with entities already embedded in the community.

In the case of the LAM, Natura has been operating in the Amazon for over two decades, fostering a wealth of local knowledge and trust through sustained presence. This long-term relationship with local cooperatives and associations has provided well-established communication channels and valuable insights into the cooperatives and associations' supply chains, which serve as the main beneficiaries of the pilot phase of the model. The presence of an anchor company like Natura, with well-established local relationships, is a crucial factor in ensuring the Mechanism's success and its potential for replication. Another consideration is communities' history of marginalization and exclusion from institutional structures and decision-making processes that directly impact their livelihoods and lands. Because of this history, skepticism and mistrust toward new development initiatives and financial opportunities is common. Natura's extensive collaboration with these communities from design to implementation has helped secure their trust and participation in the Mechanism.

To ensure scalability and increased productivity in the long term, it is vital to engage and strengthen the entire supply chain by including grassroots organizations, accelerators, innovation centers, off-takers, and local and federal governments. This demonstrates the crucial role of the ECF in the success of this Mechanism. By acting as a trusted partner, Natura has played a crucial role in ensuring that communities perceive the Mechanism as a genuine opportunity for economic empowerment and sustainable regional development, rather than as a top-down approach. Together, these efforts illustrate the significance of local knowledge and engagement in creating effective, sustainable solutions for supply chains in the Amazon.

3. Empower communities through technical assistance

It is crucial that the proposed investment not only serves its production role but also enhances the resilience and empowerment of local communities. The ECF was established to support capacity building, strengthening NTFP value chains while creating the conditions necessary for sustainable productivity improvements in local communities and the broader region.

The Technical Assistance provided through the ECF is used to improve NTFP value chains by strategically utilizing philanthropic capital to strengthen the financial management capabilities of cooperatives and associations led by local communities. Firstly, it prepares them to access finance through the Receivables Fund, and secondly, it helps monitor that the credit is used as planned. This approach helps overcome limited access to capital, technological gaps, and infrastructural shortcomings that small suppliers often face, which hinder their ability to scale up NTFP production.

The Technical Assistance aims to support institutional and operational strengthening of the cooperatives and associations, as well as climate and biodiversity-oriented initiatives such as agroforestry systems by providing necessary investment in areas such as financial management, sustainable harvesting practices, and supply chain logistics. This not only increases their production capacity and the efficiency and resilience of their sourcing systems but also uplifts the communities where these cooperatives are based. Together, these efforts contribute to sustainable development and empower local stakeholders within the broader context of NTFP value chains.

4. Catalyze sustainable investments through innovative finance mechanism

Innovative blended finance emerges as a key element of LAM's success and replicability. By strategically combining different types of capital (philanthropic, concessional, and commercial), the Mechanism distributes risk across various stakeholders. For example, philanthropic funding played a crucial role in the early stages, addressing perceived high risks and funding extensive financial and technical assistance to build capacity among the cooperatives and associations.

Within this blended finance framework, Natura plays a crucial role as both an initial off-taker and an anchor investor in the fund's subordinated tranche, as well as in the ECF. Concessional capital is essential for mobilizing the necessary investment from commercial investors, particularly during the pilot phase. This capital provides much-needed fixed rates below market levels, which are more aligned with the realities faced by local communities.

In tandem with concessional capital, catalytic capital also played a critical role in the success of the LAM, positioning the project as more attractive to commercial investors by absorbing a portion of the financial risk and enhancing the terms of financing for local cooperatives and associations. By taking on a first-loss position in the financing structure, Natura, as a catalytic investor, absorbed initial losses in the event of a default. This reduced risk exposure for commercial investors positioned in the senior tranche, ensuring that they were protected from direct loss.

The integration of concessional and catalytic capital serves as a cornerstone for unlocking additional funding from commercial sources. Additionally, biodiversity credits could be explored as an emerging revenue source, offering an opportunity to generate financial returns from conservation efforts while reinforcing the Mechanism's commitment to nature-positive outcomes.

As the business model demonstrates its effectiveness and establishes a solid track record, the reliance on concessional capital tends to diminish. Meanwhile, the structures put in place reassure investors that the project has a strong foundation, reinforced by partners with vested interests in both its conservation efforts and economic outcomes. This collaborative approach builds confidence in the Mechanism, extending beyond traditional financial metrics to foster long-term sustainability and investment in forest-based projects. NbS projects in other regions could adapt this flexible approach to finance by blending capital to match local needs and attract commercial investors over time.

5. Build resilience through smart design and inclusive governance

Though complex, a single, multistakeholder governance system can improve the functioning of the Mechanism. By having both the debt instrument, the CRA, and the technical assistance facility, the ECF, operate under a single governance process, the Mechanism can align interests and long-term objectives of multiple stakeholders more effectively. Furthermore, the inclusion of external stakeholders in the governance structure enhances legitimacy and transparency and fosters a deeper understanding of local needs and challenges.

6. Securitization with fixed rates and simplified documentation

The securitization model with simplified documentation and fixed interest rates for borrowers addresses the challenges faced by many beneficiaries who lack a credit track record and sufficient experience with mechanisms like the CRA.

The choice of CRAs as the primary instrument in the LAM and its securitization was crucial for attracting investors, offering several advantages suited to the unique challenges of financing conservation and bioeconomy projects in the region. The introduction of fixed interest rates further played a vital role in securing the commitment of beneficiaries. Given the country's historical fluctuations in interest rates, offering fixed rates helped alleviate uncertainties linked to previous challenges encountered in other credit operations.

One key advantage of the CRAs is their ability to bundle receivables from small-scale, forest-based activities into larger, more investable assets. By aggregating individual receivables into a single, larger asset, CRAs enable small, dispersed projects – often struggling to attract mainstream investors due to their size and risk profiles – to gain access to financing. This makes CRAs an ideal fit for aggregating smaller, localized nature-positive activities.

Moreover, CRAs are structured to be asset-backed, featuring a variety of receivables from individual rural producers (banknotes). This diversification, supported by Natura's commitment as an off-taker and first-loss investor, enhances the security of the instrument for commercial investors, reducing the perceived risks associated with small or unknown projects. Other instruments may not provide this level of risk mitigation, particularly for early-stage, nature-based ventures.

Lastly, while these mechanisms often involve a series of complex documents, making comprehension difficult, the simplified documentation and language in the LAM facilitates communities' understanding of the purpose and benefits of the Mechanism. To enhance understanding, materials explaining the CRA were crafted in detailed, accessible language to the communities, and its length was considerably reduced from ~40 pages to less than ten. Additionally, the Securitization Company was made available to cooperatives and associations to clarify any questions regarding necessary documents, such as the Rural Product Note (CPRF) and the CRA Adhesion Agreement. This simplification and adaptation of the CRA documentation were essential to ensure comprehension and buy-in for the operation.

7. Creating the right conditions: enabling environment for growth

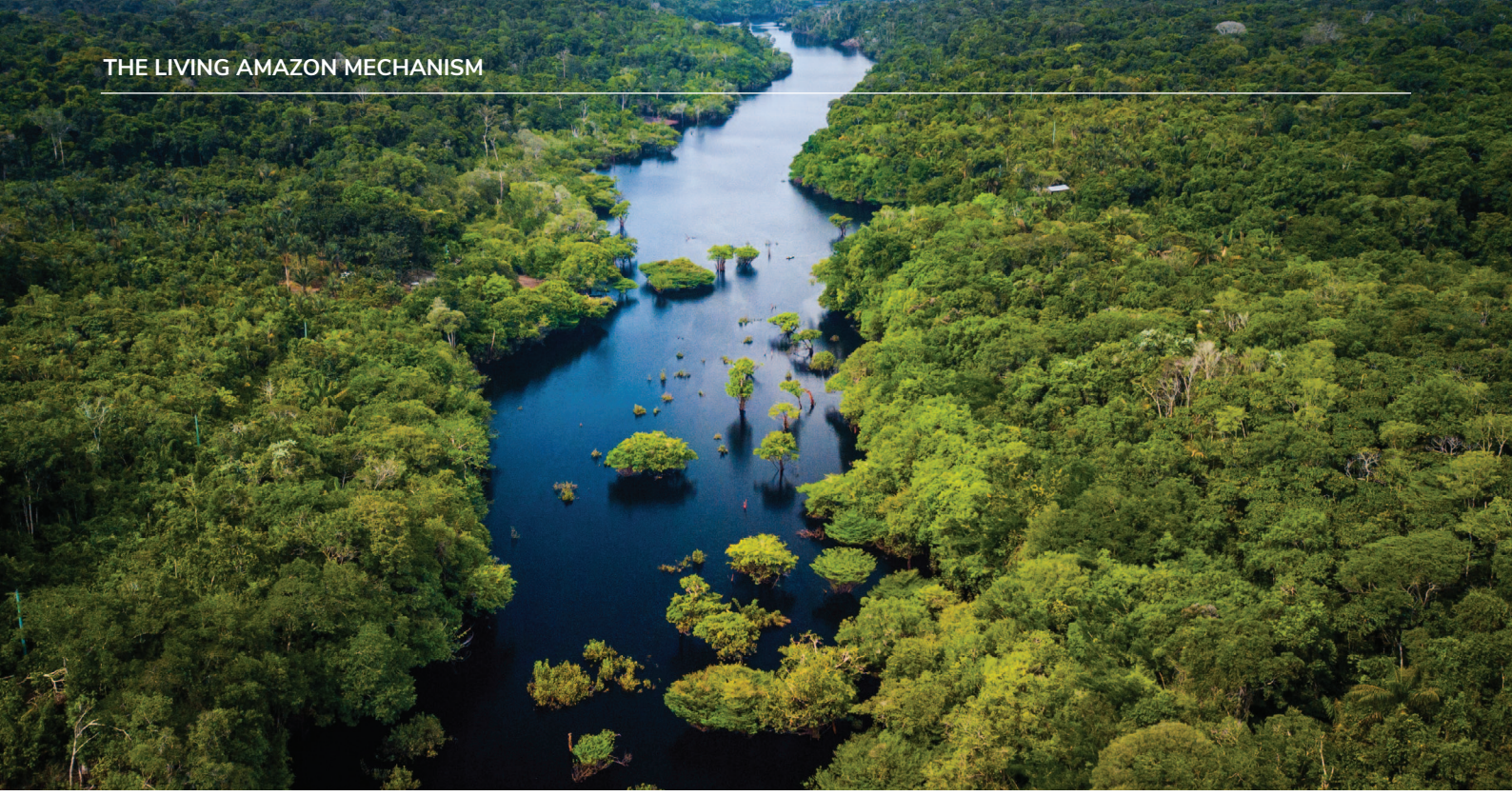
The successful scalability or replicability of socio-bioeconomy models such as the LAM also requires governments to create an enabling environment for widespread adoption and implementation of these solutions. Several actions have been discussed in recent forums, such as UNEP FI's study for the G20 Sustainable Finance Working Group, G20 Recommendations: Advancing a Nature-Positive Economy and Just Transition,[3] as well as consultations with market participants. These discussions underscore the critical role of public policy in creating the necessary enabling environment for the scaling of NbS and more concretely for the development of socio-bioeconomy, and for leveraging private finance.

Some of these actions include:

- **Promote use of public capital as a de-risking mechanism to attract private investment in socio-bioeconomy and NbS projects.** Public capital can take on a portion of the financial risks that typically deter private investors, providing a safety net through government-funded guarantees or other insurance mechanisms. This reduces entry barriers for investors and fosters a safer investment landscape, allowing NbS projects to scale with greater financial backing. Within the LAM, this approach is crucial for driving funding toward the mechanism and demonstrates how public capital can catalyze a transition toward sustainable, nature-positive investments.

[3] "G20 Recommendations: Advancing a Nature-Positive Economy and Just Transition," August 2024, https://www.unepfi.org/publications/g20-recommendations-advancing-a-nature-positive-economy-and-just-transition/.

- **Incentivizing the socio-bioeconomy and other NbS through different policy tools is essential, particularly in sectors aligned with the socio-bioeconomy.** Through tax incentives, subsidies, or favorable financing conditions, governments can encourage widespread participation in NbS initiatives that deliver social and environmental benefits, advancing a more sustainable economy in the Amazon. By tailoring these incentives toward projects that align with sustainable agriculture, forestry, and other nature-positive sectors, policymakers can significantly enhance the productive capital available to socio-bioeconomy enterprises, promoting a pathway that balances development with conservation.
- **Establish standards to strengthen nature-positive financing.** Policymakers should support the development of standards for financial instruments designed to promote nature conservation, such as nature bonds, sustainability-linked bonds, or loans, ensuring the verification of environmental claims and the prevention of greenwashing (UNEP FI, 2024b, 3-4), which is critical to build trust among stakeholders, thereby amplifying the impact of these tools in support of NbS.
- **Develop high-integrity biodiversity credit markets.** Favoring the creation of biodiversity credit markets can also offer innovative mechanisms to finance conservation, restoration, and biodiversity loss mitigation. Such markets can help align corporate nature-positive strategies with regulatory compliance while addressing broader environmental challenges (UNEP FI, 2024b, 5). By fostering biodiversity credit systems, governments and private actors can create sustainable financing channels that scale up NbS.
- **Enforcing supply chain sustainability and transparency.** Governments should mandate supply chain regulations requiring companies to assess and track environmental impacts and prioritize sustainably sourced products (UNEP FI, 2024b, 3). To complement these efforts, policymakers can drive transparency and accountability by encouraging the adoption of nature-related disclosures, such as those outlined by the Task Force on Nature-related Financial Disclosures (TNFD) (UNEP FI, 2024b, 3).
- **To ensure a lasting impact, public policies must support decent living ("vida digna") in rural areas where socio-bioeconomy and NbS value chains are based.** This requires comprehensive support for rural infrastructure - health, education, transport - and guaranteed access to sustainable market opportunities, enabling communities to thrive without migrating to urban centers. The LAM advocates for such inclusive policies as a foundation for NbS projects that not only conserve the Amazon but also foster resilient, prosperous communities.
- **Redirect harmful subsidies to nature-positive activities.** Redirecting public funds from environmentally harmful subsidies to nature-positive activities is crucial. In 2023, global subsidies for activities detrimental to the environment amounted to USD 1.7 trillion. Reallocating even a fraction of these funds could significantly bolster conservation efforts, supporting countries in achieving their commitments under the Rio Conventions while promoting sustainable economic practices (UNEP, 2023, xi; UNEP FI, 2024b, 7).



Part 3:
Market, Policy, and Institutional Landscapes for NTFPs in the Brazilian Amazon: Challenges and Investment Drivers

This section examines the potential of NTFPs in the Brazilian Legal Amazon by mapping existing value chains, market dynamics, and the policy and institutional drivers that can support the LAM as a Revenues model for local socio-biodiversity supplier cooperatives and associations in the Brazilian Amazon through sustainable supply chains.

Market Potential Rooted in Cooperatives and Associations: Local Participation

Local communities, alongside local cooperatives and associations are not only stewards of biodiversity in the Amazon but also pivotal actors in unlocking the region's socio-bioeconomic potential. Their longstanding knowledge and sustainable harvesting practices underpin the resilience of Non-Timber Forest Product (NTFP) value chains and help maintain forest health and ecosystem integrity (Garrett et al., 2023, 5–6). By engaging in NTFP markets, these communities sustain cultural heritage while participating in and shaping modern economic systems (Garrett et al., 2023, 2).

Cooperatives and associations play an essential role in transitioning these traditional activities into viable market opportunities. They serve as intermediaries that aggregate forest products from multiple smallholders, provide storage and processing facilities, and increase producers' negotiating power, bridging the gap between remote communities and broader markets (Rodrigues, 2023). Their ability to scale impact positions them as natural partners for inclusive market development strategies.

While detailed data on the number and scale of cooperatives and associations in the region is limited, owing to logistical and data collection challenges, their operational presence and influence are undeniable. These entities are central to building a socio-bioeconomy that is economically viable, ecologically sustainable, and socially inclusive.

A compelling case for the market potential of community-based NTFP production comes from a study in Pará State, where local communities participated in company-community partnerships (CCPs) with a multinational buyer. These communities, often located in remote areas with limited infrastructure, experienced measurable economic benefits:

- Participation in NTFP value chains increased household incomes;
- Cooperative membership further enhanced gains, offering training, processing, and marketing support, with a reported annual income increase of USD 1,916;
- Conversely, household income dropped 15–20% for each additional kilometer from roads or rivers, highlighting the critical importance of access and logistics (Antunes et al., 2021, 11–12).

These insights point to the transformative effect of targeted investments in logistics, cooperative capacity, and market facilitation, especially in remote regions where natural capital is high but commercial connectivity remains low.

Looking ahead, the socio-bioeconomy offers Brazil a unique competitive advantage. By shifting away from dependency on low-value commodities toward high-value, biodiversity-based products, Brazil can position itself as a global leader in sustainable trade. A prime example is açaí, a widely used NTFP in the food and pharmaceutical sectors. Brazil currently supplies 85% of global açaí production, and in 2020 generated over USD 134 million - more than any other NTFP. While unprocessed açaí yields just USD 57 per hectare annually, its value can rise to 50-fold through local processing and branding (WWF-Brasil, 2023, 6).

While açaí exemplifies the socio-bioeconomy's potential, the prioritization of a single species, even one embedded in sustainable supply chains, can also carry ecological and social risks. The over-concentration on the production of a single NTFP may lead to the simplification of forest ecosystems, undermine the diversity of traditional uses, and displace other NTFPs that contribute to food security and resilience. This monocultural tendency, even within native species, can weaken the broader goals of conservation and community autonomy. Therefore, a diversified portfolio of NTFPs is essential to safeguard ecological integrity and ensure the long-term sustainability of socio-biodiversity value chains.

Unlocking this kind of value at scale - especially through local community-led cooperatives - represents a major market development opportunity. It demands investment in enabling conditions: access to finance, infrastructure, capacity building, and long-term market partnerships. With these elements in place, socio-bioeconomy actors can be powerful engines of inclusive green growth.

Market Assessment: NTFP Value Chains

The Brazilian Legal Amazon spans nine states - Acre, Amazonas, Amapá, Mato Grosso, Pará, Rondônia, Roraima, Tocantins, and part of Maranhão, and is home to 28 million people, including 198 Indigenous groups representing 50 different language families (WRI, 2023, 16). Amazonas, the largest state, is roughly the size of France, Spain, Sweden, and Greece combined, followed by Pará and Mato Grosso ('Consórcio Amazônia Legal', n.d.).

The region is also highly economically diverse, comprising 27 distinct subregions across its nine states. Despite this diversity, economic disparities persist; while Pará and Mato Grosso lead in exports, income levels in rural Amazonas, western Maranhão, and parts of Pará (such as Marajó-Baixo Tocantins) remain below the national average. Importantly, these regions also show the highest participation of Afro-Descendant Peoples and Indigenous Peoples in NTFP-based economies (WRI, 2023), highlighting a strong socio-economic connection between biodiversity conservation and inclusive development.

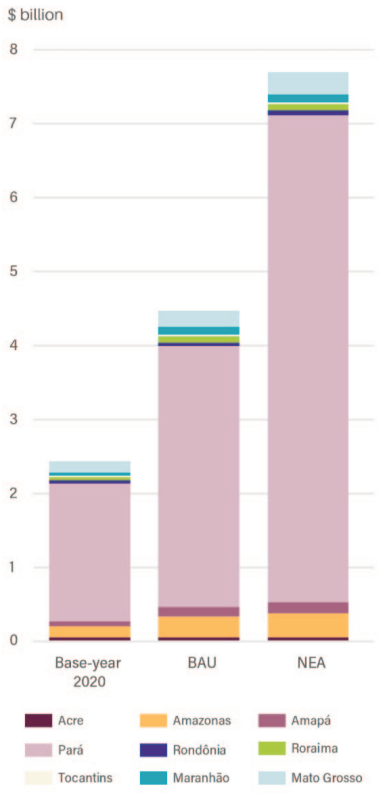
Between 2017 and 2019, key exports from the Brazilian Legal Amazon - soy, corn, beef, cotton, and timber - were valued at approximately USD 34 billion. In stark contrast, exports of NTFPs reached just USD 298 million, representing less than 0.2% of the market (UNEP, TNC and TFA, 2024). This discrepancy illustrates a significant untapped opportunity to expand sustainable socio-bioeconomy supply chains that support standing forests and local livelihoods.

While NTFPs may appear economically modest compared to dominant industries, their value per hectare can be up to four times higher than cattle ranching and nearly competitive with timber production, generating about USD 394 million annually (UNEP, TNC and TFA, 2024). Moreover, the sustainable management of NTFPs contributes directly to biodiversity conservation and rural employment, with over 90% of NTFP-related jobs held by Indigenous communities (UNEP, TNC and TFA, 2024).

Pará, which holds 1.2 million km² of rainforest, 77% of which is under protection, has emerged as a leading socio-biodiversity economy. In 2019 alone, value chains linked to 30 key socio-biodiversity products generated 224,000 jobs and BRL 5.4 billion (USD 945 million) in revenues, with BRL 4.24 billion (USD 741 million) captured as local income for the State of Pará. This figure is comparable to the revenue from livestock (BRL 4.25 billion), but delivers greater ecological benefits, including conservation of native vegetation and the maintenance of ecosystem services like climate regulation (TNC, IDB, Natura, 2022, 2; TNC, IDB and Natura, 2021b, 5).

Similarly, a study by WRI-Brasil estimates that the Amazonian bioeconomy's GDP – (considering only 13 native products such as açaí, palm heart, cocoa, Brazil nut, babassu coconut, cupuaçu, honey, rubber, buriti, urucum, copaiba, and andiroba) could grow from USD 3 billion in 2020 to nearly USD 8 billion by 2050. Pará, Amazonas, and Mato Grosso are expected to lead this expansion (WRI, 2023). Although this projection extends beyond strictly NTFP activities, it underscores the sector's vast potential across the Brazilian Amazon, offering strategic entry points for scaling and replicating mechanisms like the LAM.

Figure 6. Bioeconomy GDP in the Legal Amazon states in base year 2020 and projected for 2050 under different scenarios.



The New Economy for the Amazon (NEA) scenario assumes expansion of the bioeconomy, targets of net emissions of 7.7 GtCO2 in 2050 (IPCC scenario SSP1-1.9) and zero deforestation, while the Business As Usual (BAU) or Reference Scenario assumes that emissions resulting from current economic activities are not restricted and that deforestation is not controlled (Source: WRI 2023, p. 106, referring to scenarios in page 78).

Beyond projections, NTFPs already represent a tangible economic engine in the region. Products such as Brazil nuts, heart of palm, and açaí are vital sources of income: in 2019, they generated BRL 140.2 million (USD 24.5 million), BLR 89.1 million (USD 15 million), and BRL 3.7 million (USD 542,366), respectively (TNC, IDB and Natura, 2022, 7). Moreover, the areas where these products are harvested, particularly on Indigenous and traditional lands, store some of the highest carbon stocks per hectare, contributing significantly to climate change mitigation. Indigenous lands, in particular, conserve 1.7 to 2.8 times more carbon per hectare than private rural properties, underlining the importance of guaranteeing legal rights for these communities to maintain their critical role in forest preservation and climate action (TNC, IDB, Natura, 2022, 9; TNC, IDB, Natura, 2021b, 23-25).

Transitioning from a deforestation-driven economy to a standing-forest bioeconomy in the Amazon is projected to require around USD 20 billion annually, roughly 1.8% of Brazil's GDP (USAID, 2024, 2). For this transition to be viable, alternative livelihoods must offer economic returns that are at least as attractive as those from destructive activities like cattle ranching and illegal logging (Hanusch and Strand, 2023).

Fortunately, the socio-biodiversity economy offers such alternatives. NTFPs such as açaí, Brazil nuts, natural rubber, and medicinal plants already generate critical income for Indigenous Peoples and local communities providing a sustainable path away from deforestation. In Pará, for instance, NTFPs contributed BRL 4.25 billion (USD 787 million) in revenue and 200,000 jobs in 2019 (TNC, IDB, Natura, 2022, 2-5; TNC, IDB, Natura, 2021a, 11). By 2040, projected revenues could soar to BRL 170 billion (~ USD 30 billion), underscoring the socio-bioeconomy's potential as both a conservation and economic growth strategy (TNC, IDB, Natura, 2021b, 29).

The global market outlook reinforces this opportunity: agroforestry product sales are expected to reach USD 20 billion by 2030, while NTFPs could account for USD 125 billion globally. Brazil alone could capture up to USD 3 billion annually from agroforestry and USD 20 billion from NTFPs (UNEP, TNC and TFA 2024; CPI, 2021). This potential remains underestimated due to the lack of standardized data and traceability, especially in informal markets (WRI, 2023).

Table 2. NTFP Value Chains: Market Scope. Source: The Nature Conservancy, 2021

Chain Type	Market Scope	Benefit	Example of Products
Long Chains	External markets (e.g., interstate or international exports)	Generate income and boost local processing and transformation sectors, increasing the original value of rural production by up to ten times.	Açaí, cocoa, and Brazil nuts
Short chains	Local consumption	Provide essential food and economic security	Honey, handicrafts, and buriti

Studies focused on the Amazonian NTFP economy identify critical success factors for scaling these value chains and supporting a sustainable transition (Rosenfeld et al., 2024):

1. Diversification and complementarity: Combining high-value NTFPs with other products or environmental services and promoting small-scale processing industries.
2. Legal protections: Effectively demarcating and protecting managed forest areas, supported by strong monitoring and law enforcement.
3. Community involvement: Engaging Indigenous and local groups, respecting cultural ties to forests, and tailoring interventions accordingly.
4. Market governance: Strengthening Indigenous and local associations, cooperatives, and promoting fair partnerships throughout the value chain.

Private Sector Leverage: Corporate Offtakes and Catalytic Capital

Long-term offtake agreements anchored by committed buyers are essential to scaling NTFP production across the Amazon. While pioneers like Natura have demonstrated the impact of such partnerships, broadening corporate engagement will be key to replicating and amplifying this success.

Companies operating in the Amazon Region

Some examples of companies already operating in the Amazon that have forest products as key inputs for their businesses are mentioned below, and thus could help unlock Amazonian biodiversity for multiple sectors:

- Beraca (since 2000): Develops natural ingredients and vegetable oils from Amazonian forest products, supplying major cosmetics and self-care brands including O Boticário, L'Oréal, P&G, Unilever, L'Occitane Brasil, Simple Organic, Aveda, and Feito no Brasil (WRI 2023, 191).
- AmazonOil, 100% Amazonia, Darvore: Refine Brazil nuts, ucuúba, and andiroba into high-quality natural oils and cosmetic ingredients.
- Grupo Centroflora: Cultivates jaborandi for pilocarpine extraction - a vital glaucoma treatment compound - supplying two-thirds of global demand and supporting 30 000 pickers through 1 100 direct sellers across Pará, Maranhão, and Piauí (WRI 2023, 192).
- De Mendes and Dengo: Transform Amazonian cocoa into premium chocolates.
- Nossa and Mazo Mana: Specialize in processing açaí berries into frozen consumer products.
- Manioca: Leverages cassava to produce a diverse range of food products and sauces.
- Veja Calçados: A franco-Brazilian footwear brand renowned for its commitment to sustainability and ethical production practices, which include environmentally and socially responsible sourcing practices for cotton and rubber from the Amazon.
- Michelin: one of the largest tire manufacturers in the world, with commitments and initiatives on sustainability, including responsible and sustainable production and commercialization of natural rubber.

Companies such as these, with a consolidated presence and business in Brazil and in the Amazon, could become committed off-takers engaged in responsible sourcing to generate stable demand, fair pricing, and lasting socioeconomic benefits.

Catalytic and Risk-Mitigation Initiatives for Scaling

Just as off-takers provide market certainty, innovative finance initiatives supply the catalytic capital and risk-sharing mechanisms needed to expand NTFP value chains, such as:

- Innovative Finance for the Amazon, Cerrado, and Chaco (IFACC): Bridges funding gaps for deforestation-free soy and beef systems. As of September 2024, IFACC counts 22 signatories, over USD 5 billion in commitments, and 11 financial products disbursed, including those for NTFPs.
- Nature Investment Lab (NY Climate Week 2024): A multi-stakeholder coalition of financial institutions, policymakers, and international bodies developing nature-positive investment strategies, regulatory guidance, and novel financial instruments (GFANZ, 2024).
- Brazil Restoration & Bioeconomy Finance Coalition (G20 2024): Aims to mobilize at least USD 10 billion in public and private capital for land restoration and bioeconomy projects by 2030.

Together, these off-taker agreements, and catalytic and blended-finance structures create a virtuous market cycle: purchase guarantees reduce risk, while catalytic finance reduces investment risk, unlocking the capital and confidence needed to scale and replicate the Living Amazon Mechanism.

Policy and Institutional Landscape: Alignment and Levers for Scaling

The existing policy and institutional frameworks have provided the essential foundation for innovative finance mechanisms like the LAM to emerge and demonstrate potential for scaling and replication:

1. National Biodiversity Strategy & Financing Alignment
Since 2023, Brazil's Ministry of Environment and Climate Change (MMA) has led a comprehensive update of its National Biodiversity Strategy and Action Plan (NBSAP), engaging over 1,000 stakeholders through online consultations and workshops. Supported by CEBDS and CNI for private-sector input and steered by CONABIO, the new NBSAP - covering 2025–2050 with interim 2030 targets - will incorporate a financing strategy aligned with the Kunming-Montreal Global Biodiversity Framework, positioning conservation finance instruments like the LAM within a "whole-of-society" approach (UNEP-WCMC, 2025, 3).

2. Ecological Transition Plan & Sustainable Taxonomy
The Ministry of Finance's Ecological Transition Plan (PTE) integrates Brazil's economic and environmental objectives, aiming to cut carbon emissions and catalyze a green economy. Central to the PTE is the Brazilian Sustainable Taxonomy, which defines clear, sector-level criteria for "sustainable" activities, including NbS. By embedding NbS criteria into taxonomies, the PTE directs private capital toward biodiversity restoration and forest-compatible value chains, offering standardized indicators that map directly into the LAM's socio-bioeconomy model (Brazil, 2024a; Brazil, 2024b; Brazil, 2024c; UNEP FI, 2024b, 2).

3. Forest Code & Rural Environmental Registry
Brazil's Forest Code mandates the preservation of Permanent Preservation Areas (APPs) and Legal Reserves on all private lands. The Rural Environmental Registry (CAR) enforces these rules via mandatory property registration. With an estimated 9 million ha deficit in Legal Reserves across the Amazon, NTFP value chains offer landowners and communities a pathway to comply with environmental requirements while generating income from standing forests. Innovative finance structures, like the LAM's CRA blended with concessional capital, can channel investments into NTFP-based supply chains that both satisfy CAR obligations and deliver stable livelihoods (UNEP, TNC and TFA, 2024, 14).

4. Land-Use Planning & Conservation Units
Brazil's network of Conservation Units (UCs) establishes protected areas for biodiversity and ecosystem services. Effective land-use planning balances these protected zones with sustainable economic activities in buffer areas. The LAM's direct engagement with local communities demonstrates how finance can unlock capital for sustainable NTFP production even adjacent to strict protection zones - thereby reinforcing compliance and supporting socio-economic development without encroaching on core conservation areas.

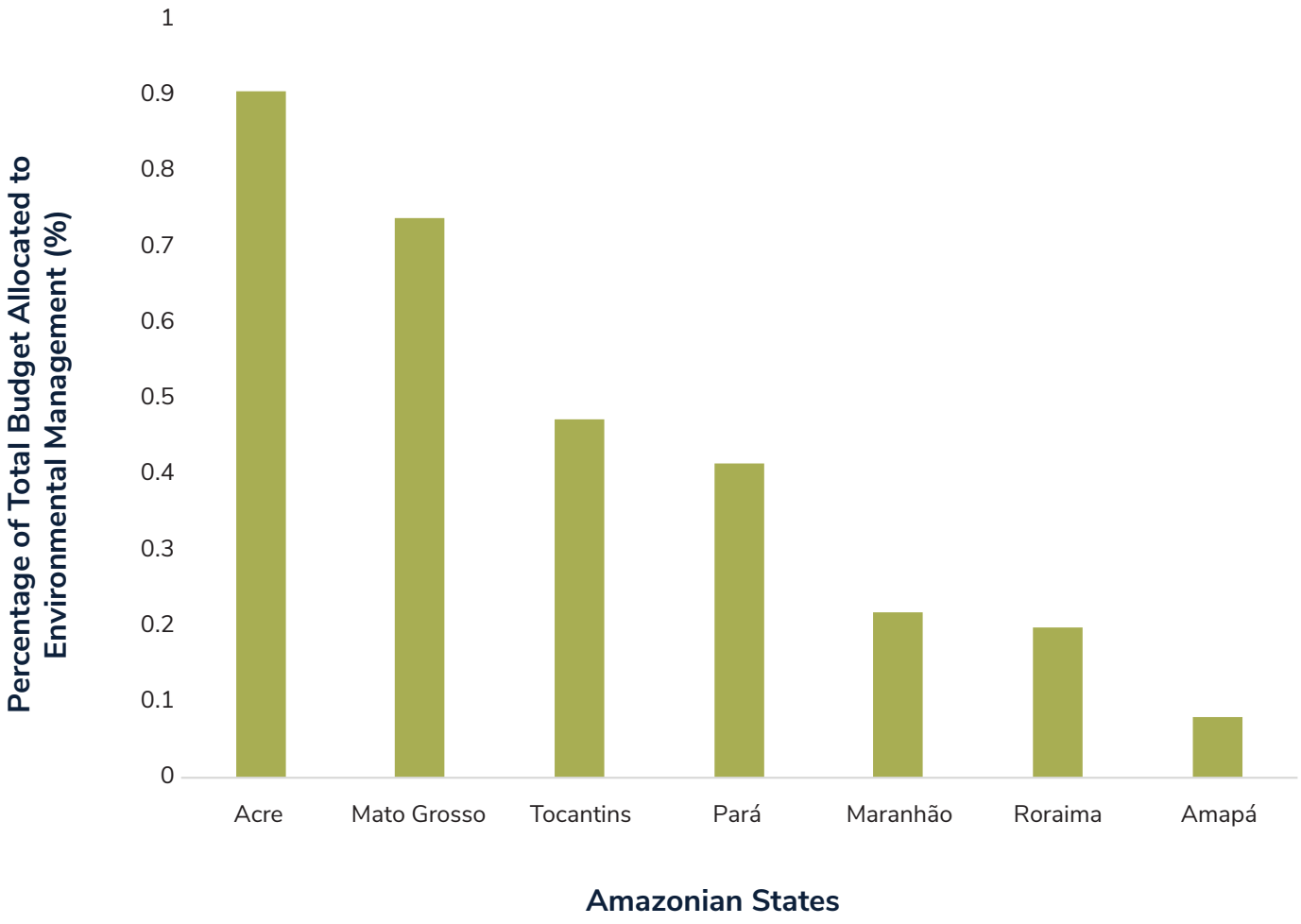
5. Emerging National Financing Platforms
In recognition of the finance gap for conservation, Brazil has launched ambitious initiatives:
Tropical Forest Finance Facility (TFFF COP16) aims to mobilize BRL 700 billion (~ USD 120 billion) to conserve 1 billion ha of tropical forests globally (Ferreira, 2024).
Eco Invest Brazil Program (under the Ecological Transformation Plan) leverages the National Fund for Climate Change to attract foreign private capital, embedding ESG criteria into dedicated credit lines and fostering public-private partnerships to modernize Brazil's capital markets (Brazil, 2023c, 2024d).

6. Central Bank Regulations & Land Tenure Security
Regulations from Brazil's Central Bank now require financial institutions to integrate environmental and climate risk into credit policies - further aligning lending with conservation goals. Yet, secure land tenure remains fundamental: it empowers local communities to invest confidently in long-term sustainable practices and fully participate in bioeconomy value chains. Clear titles and communal rights are therefore critical enablers for scaling LAM-style mechanisms.

Institutional Readiness: Mapping Public Sector and Ecosystem Enablers

The Interstate Consortium for the Sustainable Development of the Legal Amazon, established in 2008 by the governors of the nine Amazonian states, serves as the primary coordination body for regional sustainable development efforts. Yet despite its mandate, public funding for environmental management remains constrained. Between 2016 and 2022, Amazonian state governments allocated only 0.41% of their budgets on average to such activities, below the 0.54% national average (WRI, 2023, 188–89). Within the region, Acre leads in commitment, dedicating 0.92% of its budget to the environmental agenda – followed by Mato Grosso, Tocantins, and Pará with more modest shares. At the lower end, Amapá, Roraima, and Maranhão allocate the smallest portions, underscoring stark disparities in public investment across the Legal Amazon. These funding gaps highlight the urgent need for strengthened institutional financing and targeted public–private partnerships to support NTFP value chains and scale the Living Amazon Mechanism.

Figure 7. Public Funding for Environmental Management (2016-2022) (Source: WRI, 2023, 188–89).



Conclusion

The LAM has been presented as a sustainable and nature-positive growth model in highly biodiverse regions, such as the Amazon, where conservation, economic development and social improvement need to walk hand-in-hand.

This Mechanism presents a compelling case for attracting impact-oriented investors by balancing risk mitigation and potential returns through innovative finance tools like the CRA. This instrument, backed by revenue streams from NTFPs, offers investors a diversified, income-generating asset while enabling positive environmental and social impacts.

To enhance scalability, investor education is needed to further explain the functioning of local mechanisms such as the CRA to international investors. It is important to highlight initiatives such as IFACC, the Nature Investment Lab, among others, which aim to help international investors better understand investments in NTFPs, as well as the design and rollout of local financial market mechanisms. Future mechanisms could explore partnerships with multilateral development banks (MDBs) and impact funds to broaden funding sources, increasing capital availability for larger initiatives. It is essential to highlight the Mechanism's positive performance in reducing financial risks for commercial investors and to position the socio-bioeconomy and other NbS as economically viable through data on long-term returns and nature benefits. Establishing clear impact metrics showcasing the Mechanism's environmental and social benefits, such as carbon sequestration, biodiversity conservation, and social resilience, can create a compelling case for large-scale investors.

Still, development financial institutions (DFIs) - both regional and international - governments, and private foundations play a crucial role in mobilizing concessional capital for socio-bioeconomy projects, while commercial banks and other financial institutions can bridge the gap between value-chain actors and investors through innovative finance solutions. Technical assistance and implementation partners working alongside local producers, such as cooperatives, are equally critical. These partnerships ensure financial sustainability for local communities managing production efficiently and strengthens resilience to market fluctuations. The LAM's success demonstrates that a holistic approach, where local communities are considered key stakeholders and involved in the decision-making process, can create environmental and social benefits alongside financial returns.

In the medium-term, the Mechanism aims to scale up by attracting additional off-takers operating in the region. The most significant outcome of this approach is the establishment of a proof of concept that could entice other investors and additional off-takers, fostering the creation of a replicable model for scaling up conservation financing across the Pan-Amazon, Congo Basin, and Southeast Asia.
Although the socio-bioeconomy may not replace all other traditional economic activities in the Amazon, such as livestock and agriculture, it does offer substantial opportunities for income diversification and forest conservation, contributing to a more just and sustainable development model in the region. By showcasing the socio-bioeconomy's potential for positive impact, this guidebook aims to provide granular guidance on how to develop socio-bioeconomy mechanisms that can be adapted and replicated elsewhere, supporting the transition of economic sectors such as agriculture and livestock toward low-carbon, sustainable models.

By transforming challenges into opportunities, the LAM not only paves the way for protecting the Amazon but also sets a powerful precedent for conservation-driven social and economic models globally. With each step forward, the Mechanism inspires a future where NbS become the cornerstone of economic resilience, environmental stewardship, and social empowerment.

Glossary

Amazon Fund, is a mechanism focused on reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks (REDD+) and was created to raise contributions so that investments can be made in efforts to prevent, monitor and combat deforestation, as well as to promote the conservation and sustainable use of forests in the Amazon Biome. The Amazon Fund is a public fund created in 2009 by the government of Brazil and managed by a public bank, the Banco Nacional de Desenvolvimento Econômico e Social (BNDES), or the Brazilian Development Bank.[4]

Assets, a present economic resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.[5]

Biodiversity credits: A biodiversity credit is a certificate that represents a measured and evidence-based unit of positive biodiversity outcome that is durable and additional to what would have otherwise occurred. In relation to this, a positive biodiversity outcome is an improvement in measures of biodiversity, a reduction in threats to biodiversity, or prevention of an anticipated decline in measures of biodiversity (BCA, 2024).[6]

Biological diversity / Biodiversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.[7]

Biome, global-scale zones, generally defined by the type of plant life that they support in response to average rainfall and temperature patterns e.g. tundra, coral reefs, or savannas.[8]

[4] For more information, please visit https://www.amazonfund.gov.br/en/home/.
[5] TNFD Glossary, V2.0 June 2024, from International Financial Reporting Standard, Conceptual Framework: Elements of Financial Statements – Definitions and Recognition (2015)
[6] Biodiversity Credit Alliance: Glossary of terms, Definition of a biodiversity credit, issue n.3
[7] The Convention on Biological Diversity, Article 2. Use of Terms,
[8] TNFD Glossary, V2.0 June 2024, from Keith A. et al. (2020) IUCN Global Ecosystem Typology 2.0 (2020)

Capital flow and financing, access to capital markets, improved financing terms or financial products connected to the management of nature-related dependencies, impacts, risks, and opportunities.[9]

Certificate of Agribusiness Receivables (CRAs), a financial instrument used in Brazil to securitize cash flows from agribusiness activities. When linked to sustainable agriculture and conservation efforts, CRAs can serve as a vehicle for financing nature-positive land management practices.[10]

Conservation, an action taken to promote the persistence of ecosystems and biodiversity.[11]

Co-operatives and associations (and family-owned farms) are agricultural enterprises managed collectively by farming families or plant extractivists. In a sustainability context, they promote agroecological practices, fair trade, and inclusive value chains that balance economic viability with environmental stewardship.[12]

Conversion is a change of a natural ecosystem to another land use or profound change in a natural ecosystem's species composition, structure, or function. Deforestation is one form of conversion (conversion of natural forests). Conversion includes severe degradation or the introduction of management practices that result in substantial and sustained change in the ecosystem's former species composition, structure, or function. Change to natural ecosystems that meets this definition is considered to be conversion regardless of whether or not it is legal.[13]

Critical habitat is any area of the planet with high biodiversity conservation significance, based on the existence of habitat of significant importance to critically endangered or endangered species, restricted range or endemic species, globally significant concentrations of migratory and/or congregatory species, highly threatened and/or unique ecosystems and key evolutionary processes.[14]

Debt-for-nature swaps, through debt restructuring agreements, governments are able to write off a proportion of their foreign held debt. The savings accrued will be channelled into domestic conservation initiatives and climate adaptation programmes. This often entails the establishment of a Conservation Trust Fund to channel the funds. Debt-for-nature swaps can target both official and commercial lending, with the former being the most common scheme.[15]

Deforestation is the loss of natural forest as a result of: (i) conversion to agriculture or other non-forest land use; (ii) conversion to a tree plantation; or (iii) severe and sustained degradation.[16]

Degradation are changes within a natural ecosystem that significantly and negatively affect its species composition, structure, and/or function and reduce the ecosystem's capacity to supply products, support biodiversity, and/or deliver ecosystem services. Degradation may be considered conversion if it: is large-scale and progressive or enduring; alters ecosystem composition, structure, and function to the extent that regeneration to a previous state is unlikely; or leads to a change in land use (e.g., to agriculture or other use that is not a natural forest or other natural ecosystem).[17]

[9] TNFD Glossary, V2.0 June 2024
[10] VERT, 2022. CRA
[11] TNFD Glossary, V2.0 June 2024, adapted from Levin, S. A. ed., The Princeton Guide to Ecology Princeton (2009)
[12] ibid
[13] TNFD Glossary, V2.0 June 2024, from Accountability Framework initiative, Terms and Definitions (2020)
[14] TNFD Glossary, V2.0 June 2024, from International Finance Corporation, Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012)
[15] UNDP BIOFIN, Catalogue of Finance Solutions
[16] Shortened from TNFD Glossary, V2.0 June 2024, from Accountability Framework initiative (Afi), Terms and Definitions (2024)
[17] TNFD Glossary, V2.0 June 2024, from Accountability Framework initiative, Terms and Definitions (2020)

Dependencies (on nature) are aspects of environmental assets and ecosystem services that a person or an organization relies on to function. A company's business model, for example, may be dependent on the ecosystem services of water flow, water quality regulation and the regulation of hazards like fires and floods; provision of suitable habitat for pollinators, who in turn provide a service directly to economies; and carbon sequestration.[18]

Ecosystem means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.[19]

Ecological integrity is defined as the system's capacity to maintain structure and ecosystem functions using processes and elements characteristic for its ecoregion.[20]

Ecosystem services are functions of an ecosystem that directly or indirectly benefit human wellbeing. Specifically, ecosystem services include both portions of the natural capital itself, such as timber or fish, that are harvested from ecosystems as well as the flows of services, such as watershed protection or climate regulation, that can be derived from and rely on stocks of natural capital.[21]

Endangered species are species considered to be facing a very high risk of extinction in the wild.[22]

Forest, land spanning more than 0.5 hectares with trees higher than five meters and a canopy cover of more than 10%, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. Forest includes natural forests and tree plantations. For the purpose of implementing zero deforestation supply chain commitments, the focus is on preventing the conversion of natural forests.[23]

Forest degradation entails a reduction or loss of the biological or economic productivity and complexity of forest ecosystems resulting in the long-term reduction of the overall supply of benefits from forest, which includes wood, biodiversity and other products or services, provided that the canopy cover stays above 10%.[24]

Forest ownership, generally refers to the legal right to freely and exclusively use, control, transfer, or otherwise benefit from a forest. Ownership can be acquired through transfers such as sales, donations, and inheritance.[25]

G20 Initiative on Bioeconomy, an international effort to promote sustainable economic growth through the use of biological resources. It supports the development of bio-based industries, circular economy models, and biodiversity conservation strategies.[26]

[18] TNFD Glossary, V2.0 June 2024, adapted from Science Based Targets Network, SBTN Glossary of Terms (2023)
[19] The Convention on Biological Diversity, Article 2. Use of Terms
[20] Biodiversity Credit Alliance: Glossary of terms, Definition of a biodiversity credit, issue n.3, from Dorren et al. (2004)
[21] UNDP BIOFIN, The Little Book of Investing in Nature, from Daly and Farley, 2004; Voldoire and Royer (2004)
[22] TNFD Glossary, V2.0 June 2024 adapted from International Union for Conservation of Nature, IUCN Red List Categories and Criteria: Version 3.1 (2012)
[23] TNFD Glossary, V2.0 June 2024 from FAO Forest Resources Assessment - Terms and Definitions, Accountability Framework Initiative Terms and Definitions (2020)
[24] TNFD Glossary, V2.0 June 2024 from FAO and UNEP, The State of the World's Forests (2020)
[25] TNFD Glossary, V2.0 June 2024 from FAO, Forest Resources Assessment - Terms and Definitions (2020)
[26] World Bioeconomy Forum (n.d.)

Global Biodiversity Framework (GBF), an international agreement adopted under the Convention on Biological Diversity (CBD) that establishes global targets and commitments to halt and reverse biodiversity loss by 2030. It provides a strategic framework for the conservation, sustainable use, and equitable benefit-sharing of biodiversity.[27]

Habitat means the place or type of site where an organism or population naturally occurs.[28]

Habitat loss is the reduction in the amount of space where a particular species, or group of species can survive and reproduce.[29]

Indigenous Peoples are inheritors and practitioners of unique cultures and ways of relating to people and the environment, and have retained social, cultural, economic, and political characteristics that are distinct from those of the dominant societies in which they live. The UN Declaration on the Rights of Indigenous Peoples does not include a definition of Indigenous Peoples and self-identification as Indigenous is considered a fundamental criterion.[30]

Key Biodiversity Area, a site contributing significantly to the global persistence of biodiversity.[31]

Land includes all dry land, its vegetation cover, nearby atmosphere, and substrate (soils, rocks) to the rooting depth of plants, and associated animals and microbes.[32]

Legal Reserves, areas within private landholdings in Brazil that must be maintained under native vegetation to comply with environmental regulations. They are essential for maintaining ecosystem connectivity, protecting biodiversity, and ensuring long-term environmental sustainability.[33]

Local Communities is a term used based on the characteristic listed by the Convention on Biological Diversity and its article 8 (j) which refer to: 'Local communities embodying traditional lifestyles relevant for the conservation and sustainable of biological diversity'. Local Communities may not identify as Indigenous but maintain close ties to their lands and resources. They typically: Reside in and derive livelihoods from specific territories; Possess traditional knowledge and cultural practices tied to their environment.[34]

Nature, the natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment.[35]

Nature-based revenue model, mechanism which can attract commercial investments - i.e. investments linked to commercial terms, such as market-rate returns, and/or commercially acceptable tenor - to enable actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits (defined as nature-based solutions).[36]

[27] Convention on Biological Diversity (2024)\
[28] The Convention on Biological Diversity, Article 2. Use of Terms
[29] TNFD Glossary, V2.0 June 2024 from UC Berkeley, Understanding Global Change
[30] Biodiversity Credit Alliance: Glossary of terms, Definition of a biodiversity credit, issue n.3 from United Nations Department of Environmental and Social Affairs
[31] TNFD Glossary, V2.0 June 2024 from International Union for Conservation of Nature, A Global Standard for the Identification of Key Biodiversity Areas: Version 1.0 (2016)
[32] TNFD Glossary, V2.0 June 2024 from IUCN, Global Ecosystem Typology (2023)
[33] WWF, Brazil (2010)
[34] UNEP FI, Key terms and abbreviations; Nature-related Finance and Indigenous Peoples. (2025)
[35] TNFD Glossary, V2.0 June 2024 adapted from Díaz, S et al., The IPBES Conceptual Framework – Connecting Nature and People (2015)
[36] From WWF and South Pole, Common Success Factors for Bankable Nature-based Solutions, (2022)

Nature-based solutions (NbS), actions to protect, conserve, restore, sustainably use, and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems that address societal, economic, and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.[37]

Nature-positive is a global societal goal defined as 'halt and reverse nature loss by 2030 on a 2020 baseline and achieve full recovery by 2050'. Nature-positive is a global and societal goal. Individual entities, geographies and countries can and must demonstrate their sufficient contribution to a global nature-positive outcome. In operationalizing nature-positive, tackling drivers and the negative and positive impacts is central. Companies and financial institutions can contribute to the Nature-Positive goal by taking these high-level actions: Assess their material impacts, dependencies, risks and opportunities; shift their business strategy and models; commit to science-based targets for nature; report their nature-related issues to investors and other stakeholders; transform by avoiding and reducing negative impacts, restoring, and regenerating nature; collaborate across land, seascapes and river basins; and advocate to governments for policy ambition.[38]

National Biodiversity Strategies and Action Plans (NBSAPs) are policy frameworks developed by countries under the Convention on Biological Diversity (CBD) to implement biodiversity conservation goals. They provide strategic direction for integrating biodiversity into national development planning.[39]

Nationally Determined Contributions (NDCs), embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. [40]

Non-Timber Forest Products (NTFPs), are any product or service other than timber that is produced in forests. They include fruits and nuts, vegetables, fish and game, medicinal plants, resins, essences and a range of barks and fibers such as bamboo, rattans, and a host of other palms and grasses.[41]

Paris Agreement, The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016. The Paris Agreement is a legally binding international treaty under the United Nations Framework Convention on Climate Change (UNFCCC) that aims to limit global temperature rise to well below 2°C, with an ambition of 1.5°C. It recognizes the role of forests, ecosystems, and biodiversity in climate mitigation and adaptation.[42]

[37] TNFD Glossary, V2.0 June 2024 adapted from IUCN, The IUCN Global Standard for Nature-based Solutions (2020)
[38] TNFD Glossary, V2.0 June 2024 from Nature Positive Initiative (2023)
[39] Convention on Biological Diversity. What is an NBSAP? (2024), https://www.cbd.int/nbsap/introduction.shtml
[40] United Nations Climate Change: Nationally Determined Contributions (NDCs).
[41] CIFOR. "Factsheet", 20 September 2010
[42] United Nations Climate Change. The Paris Agreement

Permanent Preservation Areas (APPs), legally designated zones in Brazil that require strict conservation measures to protect ecological functions. These areas include riparian forests, wetlands, and steep slopes that contribute to water regulation, biodiversity conservation, and climate resilience. Permanent Preservation Areas (APP) are areas of vegetation that have been designated for protection because they have been identified as critical to the preservation of essential ecosystem functions, such as ensuring a clean and steady water supply, regulating hydrological and weather cycles, protecting geological and soil stability, or conserving biodiversity. The Forest Code requires that the vegetation in Permanent Preservation Areas be left intact. The code also sets Permanent Preservation Areas restrictions according to geographical features and their physical attributes. Geographical features that may be protected include banks of rivers, springs, and lakes, mangroves, vereda (type of wetland), hilltops, steep slopes, and sandbanks.[43]

Protected area, a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.[44]

Regenerated Forest, a previously degraded or deforested area that has undergone natural or assisted ecological recovery. Regeneration processes restore biodiversity, improve carbon sequestration, and enhance ecosystem resilience.[45]

Resilience is defined as having the capacity to live and develop with change and uncertainty. It provides capacities for turning risks into opportunities. This includes: (1) adaptive capacities to absorb shocks and turbulence and avoid unpleasant tipping points, thresholds, and regime shifts; (2) capacities to prepare for, learn from, and navigate uncertainty and surprise; (3) capacities for keeping options alive and creating space for innovation; and (4) capacities for systemic transformation in the face of crises and unsustainable development pathways and traps.[46]

Resources, five fundamental resources in the environment that are essential to sustaining all life: water, nutrients, oxygen, carbon, and energy.[47]

Restoration is any intentional activity that initiates or accelerates the recovery of an ecosystem from a degraded state. Active restoration includes a range of human interventions aimed at influencing and accelerating natural successional processes to recover biodiversity ecosystem service provision. Passive restoration includes reliance primarily on natural process of ecological succession to restore degraded ecosystems, but may include measures to protect a site from processes that currently prevent natural recovery (e.g. protection of degraded forests from overgrazing by livestock or unintentional human-induced fire).[48]

Rural Product Note (CPR), the Cédula de Produto Rural (in Portugues) is a credit instrument used in the Brazilian agricultural sector, created by Law No. 8,929 of 22 August 1994. It aims to provide greater liquidity to rural producers, allowing them to obtain financial resources in advance, based on future agricultural or livestock production. The CPR can be issued by rural producers, agricultural co-operatives and even by individuals or companies operating in the agribusiness production chain. The CPR acts as a promise to deliver rural products on a future date and can be traded on the financial market.

[43] Climate Policy Initiative: Brazil's New Forest Code. (2015)
[44] TNFD Glossary, V2.0 June 2024 from IUCN, Guidelines for Applying Protected Area Management Categories (2018)
[45] Soil Association: Regenerative Forestry. (2022)
[46] TNFD Glossary, V2.0 June 2024 from Folke, C. et al. (2016) Social-Ecological Resilience and Biosphere-Based Sustainability Science, Ecology and Society; Rockström, J.et al. Krishnan, L. Warszawski, and D. Nel., Shaping a Resilient Future in Response to COVID-19, Nature Sustainability (2023)
[47] Global Ecosystem Topology (IUCN), Glossary of selected terms
[48] TNFD Glossary, V2.0 June 2024 from IPBES Glossary

Securitization Model, a financial mechanism in which certain types of assets are pooled so that they can be repackaged into interest-bearing securities. The interest and principal payments from the assets are passed through to the purchasers of the securities. In biodiversity finance, securitization can apply to carbon credits, biodiversity credits, or sustainable agroforestry projects to attract investment and enhance liquidity.[49]

Socio-biodiversity refers to the integrated relationship between biological diversity and the cultural, social, and economic practices of communities that conserve and manage it, particularly within agricultural and forest landscapes. In the agro-industry context, this concept underscores the value of native species, traditional crop varieties, and locally adapted farming systems shaped by Indigenous and local knowledge. It promotes sustainable use of biodiversity while supporting inclusive value chains that recognize the rights and livelihoods of rural communities. The term is widely used and understood in the Latin America and Caribbean (LAC) region, especially in Brazil, where it underpins national policies and markets related to "Produtos da Sociobiodiversidade" (Socio-biodiversity Products). These frameworks aim to strengthen community-based economies, conserve native ecosystems, and enable equitable participation in agro-industrial supply chains.

Socio-Bioeconomy, Socio-bioeconomies are innovative models of development that prioritize the well-being of communities while maintaining the health of ecosystems. Unlike conventional economic models that often prioritize short-term profits, particularly through the exploitation of natural resources, socio-bioeconomies aim to create long-term solutions where economic development, social equity, and environmental preservation are interwoven. In the context of the Amazon, this means finding ways for local communities, particularly Indigenous Peoples, to derive economic benefits from the forest without depleting it.[50]

Species are a fundamental category for the classification and description of organisms, defined in various ways but typically on the basis of reproductive capacity; i.e. the members of a species can reproduce with each other to produce fertile offspring but cannot do so with individuals outside the species.[51]

Supply chain, the linear sequence of processes, actors, and locations involved in the production, distribution, and sale of a commodity from start to finish.[52]

Sustainable use means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.[53]

Target 19 of the Global Biodiversity Framework aims to increase financial resources from all sources to implement biodiversity conservation measures. Target 19 states: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year.[54]

[49] IMF. What is Securitization? (2008)
[50] Tropical Conservation Fund: Socio-economies.
[51] TNFD Glossary, V2.0 June 2024 from Levin, S. A. ed., The Princeton Guide to Ecology (2009)
[52] TNFD Glossary, V2.0 June 2024 from Task Force on Climate-related Financial Disclosures, Guidance on Scenario Analysis for Non-Financial Companies (2020)
[53] The Convention on Biological Diversity, Article 2. Use of Terms
[54] Convention on Biological Diversity: Target 19.

Threatened species, species assessed as facing a high risk of extinction in the wild in the medium-term. This includes flora and fauna listed in the International Union for Conservation of Nature (IUCN) Red List.[55]

Traditional knowledge is the knowledge, innovations, and practices of Indigenous Peoples and Local Communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.[56]

Value chain, the full range of interactions, resources and relationships related to a reporting entity's business model and the external environment in which it operates. A value chain encompasses the interactions, resources and relationships an entity uses and depends on to create its products or services from conception to delivery, consumption and end-of-life, including interactions, resources and relationships in the entity's operations, such as human resources; those along its supply, marketing and distribution channels, such as materials and service sourcing, and product and service sale and delivery; and the financing, geographical, geopolitical and regulatory environments in which the entity operates.[57]

Disclaimer:

* Currently the Convention on Biological Diversity uses the term 'Indigenous Peoples and local communities'; however, this is under consideration and may be updated at the per decision 15/21. In the paper we therefore use the term "Indigenous Peoples and local communities wherever we can to differentiate these groups as relevant. Note that there is a lot of regional variation and that Indigenous Peoples are sometimes considered local communities, and local communities can sometimes contain individuals that are Indigenous, yet the two groups are not identical and may have different levels of rights or voice in a particular society. The term "local communities" is far broader and doesn't necessarily have the same association with traditional ecological knowledge or biodiversity conservation. Indigenous Peoples have important and unique rights linked to biodiversity that are recognized by international law, but are not always viewed as obligatory or upheld in practice, including rights recognized in UNDRIP and other international instruments, as well as Afro-descendant and other types of local or tribal communities (with different UN recognition, e.g., ILO Convention 169 regarding tribal communities and UNDROP related to the rights of peasants). These groups may want and/or need different things from nature-related revenue mechanisms, and eventually guidance on the theme of this Guidebook should address these matters with more granularity.

[55] TNFD Glossary, V2.0 June 2024 from IUCN Red List categories and criteria (2012)
[56] TNFD Glossary, V2.0 June 2024 from Convention on Biological Diversity, Glossary of Relevant Terms (2018)
[57] TNFD Glossary, V2.0 June 2024 from International Financial Reporting Standard, S1 General Requirements for Disclosure of Sustainability-related Financial Information (2023)

Bibliography

Antunes, Aghane, Cynthia S. Simmons, et al. 2021. 'Non-Timber Forest Products and the Cosmetic Industry: An Econometric Assessment of Contributions to Income in the Brazilian Amazon'. Land 10 (6): 588. https://doi.org/10.3390/land10060588. https://www.mdpi.com/2073-445X/10/6/588

Araujo, Emmanoella Costa Guaraná, Thiago Cardoso Silva, et al. 2024. 'Bioeconomy in the Amazon: Lessons and Gaps from Thirty Years of Non-Timber Forest Products Research'. Journal of Environmental Management 370 (November):122420. https://doi.org/10.1016/j.jenvman.2024.122420. https://www.sciencedirect.com/science/article/pii/S030147972402406X?via%3Dihub

BGCI. 2019. GlobalTreeSearch. Botanic Gardens Conservation International. Richmond, UK. www.bgci.org/globaltree_search.php.

Brazil. 2024a. Plano de Transformação Ecológica. Accessed 13 November 2024. https://www.gov.br/fazenda/pt-br/acesso-a-informacao/acoes-e-programas/transformacao-ecologica/saiba-mais.

Brazil. 2024b. Novo Brasil - Plano de Transformação Ecológica. Accessed 13 November 2024. https://www.gov.br/fazenda/pt-br/acesso-a-informacao/acoes-e-programas/transformacao-ecologica.

Brazil. 2024c. Fundo Nacional sobre Mudança do Clima. Accessed 13 November 2024. https://www.gov.br/mma/pt-br/composicao/secex/dfre/fundo-nacional-sobre-mudanca-do-clima.

Brazil. 2024d. Eco Invest Brasil. Accessed 11 November 2024. https://www.gov.br/tesouronacional/pt-br/fomento-ao-investimento.

Climate Policy Initiative (CPI). 2021. 'Public Policies for the Protection of the Amazon Forest: What Works and How to Improve'. September 2021. https://www.climatepolicyinitiative.org/publication/public-policies-for-the-protection-of-the-amazon-forest-what-works-and-how-to-improve/

Climate Policy Initiative (CPI) 2024. 'Toolbox on Financing Nature-Based Solutions'. September 2024. https://www.climatepolicyinitiative.org/publication/toolbox-on-financing-nature-based-solutions/.

Conexus. 2021. Finanças que Impactam: Estudo sobre Oportunidades de Financiamento para a Cadeia da Castanha-do-brasil. Belém, PA: January 2021. https://www.conexsus.org/website/wp-content/uploads/2021/04/cx-estudo-sobre-oportunidades-de-financiamento-para-a-cadeia-da-castanha-do-brasil.pdf

Consórcio Amazônia Legal. n.d. CAL - Institucional. Accessed 28 January 2025. https://www.consorcioamazonialegal.gov.br/quem-somos.

Convention on Biological Diversity. 2024. What is an NBSAP?. https://www.cbd.int/nbsap/introduction.shtml.

Ferreira, Shagaly. Destravar investimentos e ter plano de ação para biodiversidade: qual é o papel do Brasil na COP-16. Estadão. Accessed 14 November 2024. https://www.estadao.com.br/economia/governanca/papel-brasil-cop16-biodiversidade/.

Garrett, Rachael, Joice Ferreira, et al. 2023. 'Supporting Socio-Bioeconomies of Healthy Standing Forests and Flowing Rivers in the Amazon'. 1st ed. Sustainable Development Solutions Network (SDSN). https://doi.org/10.55161/GAXE5921.

GFANZ. 2024. 'Unlocking Brazil's Green Potential: New Nature Investment Lab Launches at Climate Week NY 2024'. Glasgow Financial Alliance for Net Zero (blog). 23 September 2024. https://www.gfanzero.com/press/unlocking-brazils-green-potential-new-nature-investment-lab-launches-at-climate-week-ny-2024/

Global Environment Facility (GEF), GEF-8 Project Identification Form (PIF), Living Amazon Mechanism, 30 November 2023, https://www.thegef.org/projects-operations/projects/11327

Hanusch, Marek, and Jon Strand. 2023. 'How Much Should We Pay to Preserve the Amazon?' World Bank Blogs (blog). 8 June 2023. https://blogs.worldbank.org/en/latinamerica/how-much-should-we-pay-preserve-amazon

Ministério do Desenvolvimento Agrário e Agricultura Familiar. 2024. 'Com redução de juros para produção de alimentos, Plano Safra da Agricultura Familiar chega ao recorde de R$ 76 bilhões'. Ministério do Desenvolvimento Agrário e Agricultura Familiar. 3 July 2024. https://www.gov.br/mda/pt-br/noticias/2024/07/comida-no-prato-com-reducao-de-juros-para-a-producao-de-alimentos-basicos-psaf-chega-ao-recorde-de-r-76-bilhoes-no-credito-rural.

NatureFinance. 2024. The Global Bioeconomy. Preliminary Stocktake of G20 Strategies and Practices: a contribution to the Brazilian G20 Presidency's Global Initiative on Bioeconomy. Accessed 10 November 2024. https://www.naturefinance.net/wp-content/uploads/2024/10/TheGlobalBioeconomyExecutiveSummary.pdf.

Pasquale, Augusto. 2024. CRA: Emissões mais do que triplicam em 5 anos e atingem R$ 23,3 bilhões. Money Times. Accessed in 9 November 2024. https://www.moneytimes.com.br/cra-emissoes-mais-do-que-triplicam-em-5-anos-e-atingem-r-233-bilhoes-pads/.

Rodrigues, Nina. 2023. 'Project Combines Income Generation in Traditional Communities with Recovery of Degraded Areas in the Brazilian Amazon'. OTCA (blog). 9 October 2023. http://otca.org/en/project-combines-income-generation-in-traditional-communities-with-recovery-of-degraded-areas-in-the-brazilian-amazon/.

Rosenfeld, Tomas, Benno Pokorny, Jacques Marcovitch, and Peter Poschen. 2024. 'BIOECONOMY Based on Non-Timber Forest Products for Development and Forest Conservation - Untapped Potential or False Hope? A Systematic Review for the BRAZILIAN Amazon'. Forest Policy and Economics 163 (June):103228. https://doi.org/10.1016/j.forpol.2024.103228. https://www.sciencedirect.com/science/article/pii/S1389934124000819

Climate Policy Initiative (CPI). 2020. 'Rural Credit Policy in Brazil: Agriculture, Environmental Protection, and Economic Development'. December 2020. https://www.climatepolicyinitiative.org/wp-content/uploads/2020/12/REL-Rural-Credit-Policy-in-Brazil.pdf

Reuters. 2023. 'COP28: Norway Gives $50 Mln to Brazil Amazon Fund as Deforestation Falls'. 11 December 2023, sec. Environment. https://www.reuters.com/business/environment/cop28-norway-gives-50-mln-brazil-amazon-fund-deforestation-falls-2023-12-11/.

TNC, IDB, Natura, 2022. 'Bioeconomia da sociobiodiversidade no Estado do Pará: Resultado e recomendações para políticas públicas'. https://www.tnc.org.br/content/dam/tnc/nature/en/documents/brasil/tnc-policy-bioeconomia_ptbr.pdf

TNC, IDB, Natura. 2021a. 'Bioeconomia da sociobiodiversidade no Estado do Pará'. 19 October 2021. https://www.tnc.org.br/conecte-se/comunicacao/noticias/estudo-de-bioeconomia/.

TNC, IDB, Natura. 2021b. 'Socio-Biodiversity Bioeconomy in the State of Pará: Executive Summary'. Brasília, DF. October 2021. https://publications.iadb.org/en/socio-biodiversity-bioeconomy-state-para.

UNEP. 2023. 'State of Finance for Nature: The Big Nature Turnaround – Repurposing $7 Trillion to Combat Nature Loss'. Nairobi: United Nations Environment Programe. https://www.unep.org/resources/state-finance-nature-2023.

United Nations Environment Programme Finance Initiative. (2024, a). G20 recommendations: Advancing a nature-positive economy and just transition. https://www.unepfi.org/publications/g20-recommendations-advancing-a-nature-positive-economy-and-just-transition/

United Nations Environment Programme Finance Initiative. (2024, b). Recommendations for scaling finance for nature-based solutions: Input paper for G20 Sustainable Finance Working Group. United Nations Environment Programme. https://www.unepfi.org/wordpress/wp-content/uploads/2024/08/Recommendations-for-designing-regulatory-frameworks-to-scale-finance.pdf

UNEP, TNC and TFA. 2024. 'Finance for a Forest-Positive Future: The Role of Agroforestry and Non-Timber Forest Products in Brazil's Agricultural Transition and the Opportunities to Scale Investment'. UNEP, The Nature Conservancy (TNC) and Tropical Forest Alliance (TFA). February 2024. https://www.ifacc-initiative.org/case-study-details/finance-for-a-forest-positive-future:-the-role-of-agroforestry-&-ntfp-in-brazil's-agricultural-transition-&-the-opportunities-to-scale-investment/aJYTG0000000MYP4A2

UNEP-WCMC.2025. NBSAPs and Private Finance Outlook: BRAZIL. https://resources.unep-wcmc.org/products/WCMC_RT662

USAID. 2024. 'Amazon Private Sector Investment Landscape: Unlocking Capital for a Standing-Forest Economy'. 25 October 2024. https://crossboundary.com/wp-content/uploads/2024/10/Amazon-Private-Sector-Investment-Landscape-USAID-Oct-2024.pdf

VERT. 2024. Baixe o Ebook e saiba as principais características do Certificado de Recebíveis do Agronegócio (CRA).

World Resources Institute (WRI). 2023. 'New Economy for the Brazilian Amazon'. São Paulo: World Resources Institute. https://www.wribrasil.org.br/nova-economia-da-amazonia. https://www.wribrasil.org.br/nova-economia-da-amazonia.

World Wildlife Fund (WWF) Brasil. 2023. 'Cadeia de valor e estrutura de mercado: a oportunidade da sociobioeconomia'. July, 11. https://acervo.socioambiental.org/acervo/documentos/cadeia-de-valor-e-estrutura-de-mercado-oportunidade-da-sociobioeconomia

Disclaimer

This report has been made available to you for information purposes only. Nothing in this report is to be construed as legal, tax, investment, financial or any other advice by Green Finance Institute Limited ("GFI"). This report does not constitute, and is not intended to constitute, an invitation, solicitation, recommendation, endorsement by GFI or any third party to take any particular course of action (including, but not limited to, entering into any financial arrangements) in the United Kingdom or in any other jurisdiction. It is not intended to be relied upon by users in making (or refraining from making) decisions of any nature (including financial or investment decisions).

The information contained in this report is of a general nature and does not address the circumstances of any particular individual or entity. Certain information contained in this report has been obtained from or is based on sources that GFI believes to be accurate and complete. This report is not, and does not purport to be, a comprehensive or complete statement or reflection of the matters set out herein. Although reasonable care has been taken to check the accuracy of the information contained in this report, GFI cannot guarantee and does not take responsibility for the accuracy or completeness of the information contained in this report. Any opinions set out in this report may be incorrect and may change at any time.

In reading and accessing this report, you alone assume the responsibility of evaluating the merits and risks associated with the use of any information contained herein before making any decisions on the basis of such information or content. GFI accepts no liability for any losses or damages (whether direct, indirect, special, consequential or otherwise) arising out of opinions, errors or omissions contained in this report, and it excludes all liability arising from this report to the fullest extent permitted by law.

You should not base any investment or financial decision solely on the basis of the information contained in this report. Where relevant, you should seek appropriate legal, tax, investment, financial or other professional advice.

GFI is not a registered investment adviser and it is not regulated by the Financial Conduct Authority.

Green Finance Institute

CONTACT US

info@gfi.green

greenfinanceinstitute.co.uk