

COP30 Presidency Roadmap to Halting and Reversing Deforestation and Forest Degradation by 2030

Dear COP30 Presidency Team,

In response to your call to gather contributions from a broad range of stakeholders, including Parties, Indigenous Peoples, Local Communities, academia, and actors in the Action Agenda, to inform the Roadmap for Halting and Reversing Deforestation and Forest Degradation by 2030, the Science Panel for the Amazon (SPA) is pleased to submit our contribution.

This roadmap, led by the COP30 Presidency, represents an important action-oriented effort to support the implementation of paragraphs 33 and 34 of the first Global Stocktake of the Paris Agreement. It provides guidance to achieve these goals, identifies existing solutions and means of implementation, and highlights key obstacles and gaps, while showcasing policies and measures that can be replicated across contexts.

Drawing on the work of more than 300 SPA scientists, our contribution provides science-based evidence on the risks and solutions needed to reverse deforestation and forest degradation, which are pushing the Amazon toward a socioecological tipping point.

The document follows the structure proposed by the COP30 Presidency:

- **Part I:** Why halting and reversing deforestation is central to the Paris Agreement
- **Part II:** What countries can and should do
- **Part III:** Fostering international cooperation and addressing regulatory bottlenecks

Recognizing the Amazon as a deeply interconnected socioecological system, this contribution also highlights ongoing solutions and innovative actions being implemented across the region. By translating scientific knowledge into actionable insights, the SPA aims to support effective policymaking and transformative action, helping align immediate priorities with long-term sustainability for a living Amazon.

We sincerely appreciate the COP30 Presidency's leadership in convening this inclusive process and advancing a collaborative, science-informed approach to addressing deforestation and forest degradation.

Sincerely,

Carlos Nobre and Marielos Peña Claros
Co-Chairs, Science Panel for the Amazon

Emma Torres
Strategic Coordinator, Science Panel for the Amazon

Part I – Why Halting and Reversing Deforestation and Forest Degradation Is Central to the Paris Agreement

1. Paris Agreement, UNFCCC and other International Commitments

GST1 § 33-34; PA Article 5; REDD+; COP Presidency's role in enabling implementation; Pact for the Future (UNGA 2024); CBD Kunming-Montreal; UNCCD LDN; UNFF; FAO Roadmap; Inter-American Human Rights Court Advisory Opinion 32/25.

2. Environmental and Scientific Aspects

Climate stability; biodiversity conservation; ecosystem integrity; water cycle.

- The Amazon basin holds the world's largest tropical forest—it is a living mosaic of interconnected terrestrial and aquatic ecosystems ¹.
- It spans approximately 7.3 million km².
- It is home to around 13% of known species globally ¹⁻⁵.
- It affects rainfall patterns on regional and global scales through “aerial rivers”. Aerial rivers contribute approximately one-third of the rain that falls within the Amazon Basin (20% along the Atlantic coast and 50% near the Andes mountains) and up to 50% of the rain that falls in other regions outside the Amazon basin, supporting crucial economic activities such as rainfed agriculture ^{1,6}.
- The Amazon plays a vital role in climate change mitigation by storing carbon equivalent to 15– 20 years of global CO₂ emissions ¹.
- There is scientific evidence that the Amazon forest is getting very close to a tipping point due to the synergistic interaction of land use and global climate change (especially the increases in temperature and reductions in precipitation)^{47,48}. If those drivers continue the Amazon may risk the tipping point between 2040-2050, up to 70% of the forest would be highly degraded, emitting more than 200 billion tonnes of CO₂, reducing the aerial rivers and losing a large amount of biodiversity. All these changes will also have large socioeconomic consequences for the region, the continent and globally⁶⁷.

3. Socioeconomic Aspects

Sustainable development; Indigenous Peoples; Local Communities; livelihoods; food security; poverty eradication; equity.

- Amazonian populations of about 48 million are highly diverse, encompassing 2.2 million Indigenous People of more than 400 ethnic groups (with and without recognized collective titles), Afrodescendant Peoples and Local Communities ^{7,8}. The Amazon is crucial for water regulation, sustaining not only the basin but also broader continental hydrological systems. It is also fundamental for local communities' livelihoods, food security, and overall well-being.
- More than 8,113 Indigenous Territories and Protected Areas ⁹ across the Amazon are vital corridors for cultural continuity and knowledge exchange.

Part II – What Countries Can and Should Do

4. Deforestation: Drivers and Solutions

Diagnosis, barriers and data

- Current cumulative deforestation has already reached ~18% of the Amazon region, placing the system dangerously close to tipping points^{1,7}.
- By 2018, approximately 867,675 km² of the Amazon had been deforested, with Brazil accounting for the largest share of loss (19%), followed by Ecuador (13%)¹⁰. More broadly, between 1985 and 2023, about 12.4% of the Amazon rainforest was lost due to anthropogenic pressures, including large-scale agriculture, cattle ranching, logging, mining, and infrastructure expansion¹¹. At the national scale, forest loss remains substantial: the Colombian Amazon lost 788,313 hectares between 2016 and 2023 (60.5% of the country's total loss), while Peru and Ecuador lost approximately 3 million (2001–2023) and 1 million hectares (2001–2024), respectively¹².

Economic drivers:

- Short-term profits and high internal rates of return from cattle ranching, land speculation, and large-scale agriculture.
- Economic incentives and financial systems favor forest land conversion, extractive industries, and infrastructure over sustainable land-use models¹³.
- Global and regional demand for commodities (e.g., beef, soy, minerals), combined with weak market regulation, continues to drive expansion into forested areas.
- Dominant models equate deforestation with production and economic growth, reinforcing forest clearing as a pathway to land value, investment, and “development.”
- Governance and institutional gaps:
- Weak environmental governance and limited law enforcement, especially in remote areas.
- Legal frameworks that allow partial deforestation (e.g., up to 20% in the Brazilian Amazon) create inconsistencies with zero-deforestation goals.
- Insufficient strategies to combat organized crime, particularly in transboundary regions.
- Limited state presence and lack of coordination across countries.

Land tenure and territorial issues:

- Land tenure insecurity and unclear ownership encourage land grabbing and speculative deforestation (“land chaos”)¹⁴.
- Large areas of undesignated public land enable illegal occupation and forest clearing. Brazilian Amazon's undesignated public forests have concentrated 32% of the 2020 deforestation^{15,16}.
- Indigenous and local governance systems often lack formal recognition and secure land rights, undermining effective territorial management despite their proven role in reducing deforestation^{58,62}.
- Illegalities, violence, and displacement
- Agricultural expansion drives illegal land markets and has caused 54.2 million ha of deforestation in the Amazon from 2001 to 2022, primarily due to cattle ranching and cash crops often linked to land speculation¹⁷.
- Illegal land markets are closely tied to organized crime, involving illegal deforestation (66%), logging (32%), environmental damage (19%), and mining (7%)^{14,19}.

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- Expansion of illegal economies and global black markets that drive processes such as illegal land grabbing and deforestation, and ultimately “launder” illicit resources into formal supply chains¹⁴.
- Violence and conflict are often linked to land disputes, illegal activities, and resource extraction. Deforestation trends are closely linked to armed group dynamics, land-use pressures, and illegal economies. For example, post-conflict transitions can trigger spikes in deforestation, while territorial control by armed actors may temporarily suppress forest loss.
- Ongoing forced displacement of Indigenous Peoples and Local Communities (e.g., illegal armed groups in the Colombian Amazon seeking control over land for coca cultivation and trafficking routes) have led to land dispossession and higher risks of cultural, environmental, and physical extinction¹⁸.

Infrastructure:

- Growth of transportation infrastructure (official and unofficial roads) that opens previously remote forests to deforestation^{20,21}.
- Large-scale projects such as hydropower, oil and gas, and mining that drive forest loss and fragmentation.

Social inequalities:

- Persistent inequalities and lack of sustainable livelihood options push fractions of local populations toward deforestation-linked activities.
- High perceived risks and limited access to finance for community-based and sustainable enterprises.

Data and monitoring gaps:

- Incompatible methodologies across countries hinder comparability of deforestation data and cross-border analysis.
- Government reluctance to recognize civil society data (e.g., MapBiomass, RAISG) creates gaps in monitoring and decision-making.

Finance imbalances:

- International forest finance is unevenly distributed across tropical regions, with non-Amazon forests underfunded despite their interconnected role in regulating global climate systems.
- Amazon-focused strategies should be aligned with broader tropical forest efforts (e.g., Congo Basin, Southeast Asia) to ensure systemic impact.

Deforestation-increasing events:

- 2012, Brazil: Revised Forest Code
- 2016, Colombia: FARC peace agreement. The armed-group dynamic cuts both ways: FARC withdrawal created a deforestation spike post-2016 peace agreement (+44% in 2017), while armed group territorial freezes partly explained the 2023 low. Cattle ranching in national parks remains endemic, with the bovine census up 48% since 2016 in Amazonian municipalities^{22,23}.
- 2016, Venezuela: Arco Minero del Orinoco decree
- In 2019, Bolivia issued Supreme Decree 3973, allowing controlled burning in Santa Cruz and Beni to expand agriculture. In practice, limited oversight and dry conditions led to widespread fires, contributing to significant deforestation and environmental damage.

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- Policy and governance changes (Peru): In 2024, Law 31973 granted amnesty for past illegal deforestation on rural lands. Around the same time, Congress weakened permitting requirements for land-use change and effectively decriminalized illegal logging for agricultural purposes, representing a significant governance rollback and increasing risks to Indigenous rights, including those of isolated groups..
- Between 2021 and 2024, Peru lost 705,000 ha of forest equivalent to 453 MtCO_{2e} (including 205,000 ha in 2024 alone), driven mainly by cocoa and palm oil expansion, as well as artisanal gold mining in Madre de Dios, reversing earlier gains from Operation Mercury.

Policy, legal, institutional, and financial instruments for implementation of Amazon protection towards zero deforestation by 2030

- Strengthen governance, monitoring, and enforcement: Enhance national and cross-border coordination to address illegal mining, illegal logging, and land grabbing, including spillover effects. This should include the operationalization of a Pan-Amazon Observatory ¹, expanded satellite monitoring, and integrated data systems to improve transparency, decision-making, and enforcement.
- Foster regional cooperation and exchange: Promote learning and exchange of successful local governance models and practices to enable cross-country collaboration, inspire scalable solutions, and leverage proven approaches. Strengthen regional cooperation through the Amazon Cooperation Treaty Organization (ACTO) and advance a basin-wide governance framework that treats the Amazon as an interconnected system.
- Prohibit legal regularization of illegally deforested areas, freeze the sale of undesignated public forests, and accelerate their demarcation for conservation, as Indigenous territories or integral or sustainable use forests ¹⁶.
- Integrate and modernize land registration systems to detect overlapping claims, prevent fraud, and trigger automatic inspection. Ensure open data and public access to strengthen accountability.
- Mandate traceability for timber, cattle, and agricultural supply chains, enforcing deforestation-free procurement and independent verification of origin.
- Ensure deforestation- and degradation-free global supply chains by enforcing corporate accountability, requiring carbon market transparency, and aligning commodity trade policies with international deforestation regulations, including the EU Regulation on Deforestation-free Products (EUDR) ²³.
- Eliminate perverse incentives that drive deforestation, such as subsidies and policies that favor cattle ranching, agricultural expansion, and frontier-opening infrastructure.
- Redirect financial flows toward sustainable land-use models, restoration, and regenerative bioeconomies.
- Promote policies that position forest conservation and restoration as viable economic alternatives that improve quality of life and support inclusive regional development.
- Adopt a new infrastructure paradigm that prioritizes ecosystem integrity, local well-being, and sustainable economies over extractive, export-oriented models. Avoid infrastructure that drives deforestation frontiers, particularly roads, large hydropower, and extractive megaprojects, and apply strict safeguards, land-use planning, and environmental governance²¹.
- Develop transport systems using a network approach that considers water, air, rail, and road options. In the Amazon context, prioritize lower-impact alternatives such as fluvial

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transport and aviation, while integrating climate adaptation to extreme events (e.g., droughts, floods, wildfires).

- Support decentralized infrastructure (such as water systems, waste management, off-grid renewable energy, and nature-based solutions) that enhance ecosystem resilience and improve living conditions in Amazonian communities^{21,24}.
- Integrate safeguards and risk management: Embed strong social, cultural, and environmental safeguards in all policies and investments. Reconfigure or halt initiatives that undermine ecological and sociocultural connectivity, while promoting actions that enhance resilience and deliver equitable benefits for communities and ecosystems.

Processes for tracking progress, reporting outcomes, and iterative improvement

- Expand and align tools such as Brazil's [Rural Environmental Registry](#) (CAR), the [Legal Amazon Deforestation Satellite Monitoring Project](#) (PRODES), [Real Time System for Detection of Deforestation](#) (DETER), Colombia's [Forest and Carbon Monitoring System](#) (SMByC), and Peru's [Geobosques](#) across Amazonian countries, and expand open-access regional platforms (e.g., [AMA](#) from the Amazon Network of Georeferenced Socio-Environmental Information - [RAISG](#), [MapBiomass](#)) to improve transparency, interoperability, and accountability. Differences in scale, methodology, and data transparency limit regional comparability and coordinated conservation strategies²³.
- Look at the problem through a connectivity loss lens, with transboundary consequences. RAISG and the Amazon North Alliance (ANA) have joined to develop collaborative studies on connectivity issues²⁵, developing a methodology that allows quantifying how much of landscape connectivity is being lost due to deforestation and degradation.
- Use regional systems such as ACTO's Integrated Information System to plan infrastructure and extractive activities while safeguarding ecological connectivity.
- Combine satellite data with ground presence, law enforcement, and partnerships with Indigenous Peoples and Local Communities; monitoring alone is insufficient to curb deforestation.
- Establish integrated strategies that combine monitoring with governance, security, and sustainable livelihood interventions.
- Strengthening commodity traceability and certification programs is crucial to ensure sustainable supply chains. However, existing initiatives—such as the Meat Terms of Adjustment of Conduct ([Meat TAC](#)), Green Seal, Brazil's Soy Moratorium, and the Roundtable on Responsible Soy—often overlook “indirect” deforestation²⁶. Effective certification must recognize and address indirect impacts. Aligning such initiatives across multiple countries would prevent deforestation-linked products from shifting to less regulated areas.
- Implement traceability platforms such as [TRASE](#) and [SIMEX](#) enhance transparency across timber, soy, and cattle supply chains by integrating satellite imagery, official registries, and trade data to expand monitoring and accountability beyond Brazil to the broader Amazon Basin, aligning with emerging international frameworks such as the EU–Mercosur agreement for zero deforestation.
- Promote platforms like [Monitoring of the Andes Amazon Program](#) (MAAP), which delivers rapid alerts on illegal mining; [Radar Mining Monitoring](#) (RAMI), which detects alluvial sites with radar and optical data; and [Amazon Mining Watch](#), which tracks ASGM disturbances.

Illustrative cases and replicable solutions

- Brazil:
 - Brazil's Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) played a significant role in reducing deforestation by 83% between 2004 and 2012, and it was relaunched in 2023 with four major foci: (i) promoting sustainable production activities; (ii) environmental monitoring and control; (iii) land and territorial planning; and (iv) normative and economic instruments. Key measures included keeping a municipal blocklist and conducting satellite surveillance (DETER). Deforestation reductions were also strongly influenced by macroeconomic shifts that reduced profitability of export-driven commodities like soy and beef ²³.
 - Brazil's CAR provides georeferenced mapping of forested and agricultural areas, ensuring more effective tracking of exported commodities. Realtime satellite tracking—through PRODES and DETER—provides early-warning systems. CAR, PRODES, and DETER could be expanded and harmonized for all Amazonian countries. Open access to integrated deforestation and degradation data platforms—including AMA from RAISG and MapBiomas—improves transparency and accountability.
 - Soy Moratorium, a landmark agreement between soybean traders, governments and civil society to avoid the purchase of soy produced on land deforested in the Brazilian Amazon ²⁷. The soy moratorium was suspended in 2026.
 - The [Amazon Fund](#) is a REDD+ mechanism created to raise donations for non-reimbursable investments in efforts to prevent, monitor and combat deforestation, as well as to promote the preservation and sustainable use in the Brazilian Amazon. As of March 2026, the fund has supported 144 projects, mobilizing over USD 1.207 billion since its creation in 2008, and disbursing USD 593 million.
 - The *Ouro Alvo* program, led by Brazil's Federal Police, uses artificial intelligence (AI) and geochemical fingerprinting to trace gold supply chains and identify laundering networks.
 - Brazil's Federal Police, the United Nations Office on Drugs and Crime (UNODC), and INTERPOL track illicit gold and mercury flows using goAML, the [FIU.net](#) system, and [Palantir Gotham](#), while the Financial Accountability and Corporate Transparency (FACT) Coalition leverages trade-tracking tools like Panjiva to expose laundering networks.
- Guyana:
 - The Guyana-Norway Partnership is a landmark collaboration aimed at addressing climate change through sustainable forest management and conservation. Norway committed up to US\$ 250 million in result-based payments to support REDD+ activities. The partnership effectively contributed to maintaining approximately 18–19 million hectares of standing forest, along with its major carbon stocks and critical ecosystem services, including water regulation and climate stability.
 - Guyana's [Low Carbon Development Strategy](#) (LCDS) 2030 aims to combat climate change while simultaneously promoting economic growth and development. It outlines how Guyana's economy can further embrace a low carbon development path by investing payments received for avoided deforestation into strategic low carbon sectors.

- Ecuador:
 - The 2023 Yasuní referendum, where 59% of voters supported halting oil extraction in Block 43, reflects one of several key milestones in a broader process in which Indigenous peoples have played a crucial role in deterring and limiting the expansion of oil activities in the region.
- Peru:
 - [Operation Mercury](#) in 2019, resulting in 90% reduction in mining-driven deforestation in La Pampa (Madre de Dios).
 - Observatory of Illegal Mining and Related Activities in Key Biodiversity Areas (OMI)²⁸.
- Colombia
 - The Amazon Regional Alliance for the Reduction of the Impacts of Gold Mining (ARAIMO) provides alerts to government agencies and uses geospatial and civil society data to guide response against illegal mining.
- Regional collaboration
 - A landmark example of international cooperation, [Operation Green Shield](#) (2025), mobilized 1,500 officers from Brazil, Colombia, Ecuador, Peru, and the UAE to combat illegal mining, logging, and trafficking using real-time data sharing via ArcGIS.
 - Amazon countries Federal Police's Polices operations now target organized crime networks linked to land grabbing and illegal logging, bolstered by the new [Center for International Police Cooperation](#) in Manaus, which facilitates regional collaboration.

5. Forest Degradation: Drivers and Solutions

Diagnosis, barriers and data

- Forest degradation is defined as the reduction of the overall capacity of a forest to supply goods and services²⁹, representing a loss in ecological value of the area affected³⁰. While deforestation is binary (i.e. either the forest is present or absent), forest degradation is characterized by an impact gradient^{20,31,32}.
- Of the Amazon's remaining forest area, 38% has been degraded due to logging, fire, drought, and fragmentation^{1,23}. Fragmentation has increased in recent decades, with fragments becoming smaller and more distant from each other^{33,34}. Some of these degradation drivers interact; for example, logged-over forests have higher risk of forest fires^{20,35}.
- The Amazon forest in 2023-2024 was deeply affected by a severe drought and a record breaking number of man-made fires, leading to large-scale forest degradation and even deforestation caused by fires.
- Carbon emissions from forest degradation (0.05–0.2 GtC yr⁻¹) are comparable in magnitude to those from deforestation, yet degradation remains largely absent from national carbon budgets and nationally determined contributions (NDC) commitments — creating a systematic undercount of the Amazon's contribution to global emissions^{1,23}.
- Understory fires cause important long-term ecological impacts²⁰. They cause high levels of stem mortality, negatively affecting carbon stocks^{31,36,37}. Forests take many years to recover: burned forests have carbon stocks that are 25% lower than expected 30 years

after fires³⁸, and it is currently unknown whether burned forests will eventually return to their original plant community composition²⁰.

- Interactions between climate and land-use change across the Amazon can create the conditions needed for more widespread and intense fires²⁰. The Amazon has been engulfed in record-breaking fires and smoke in 2024³⁹. With more edges and drier climatic conditions, we expect fire line intensity to greatly increase, potentially causing the mortality of many more trees, and subsequently resulting in even more CO₂ emissions. In addition, some projections point to a potential expansion of fire geography to historically wetter areas, a likely effect of the combination of climate and land-use change²⁰.
- Edge effects may extend hundreds of meters into adjacent forests⁴⁰. Changes in microclimate contribute to elevated tree mortality, especially within the first 100 m of a forest edge^{41,42}. Across the Amazon, 947 Tg C were lost between 2001 and 2015 due to edge effects, representing a third of the losses from deforestation in the same period⁴³. Forest edges are more susceptible to other types of disturbance³⁷, especially understory fires³⁸.
- The Pan-Amazonian countries produce 13% of the tropical sawnwood volume²⁰. In the Brazilian Amazon, selective logging affects an area as large as that deforested annually⁴⁴. Selective logging is the second most common driver of forest degradation in the Brazilian Amazon, behind only edge effects⁴⁴. Logging impacts species composition, carbon stocks, temperatures within the forest, as well as energy and water fluxes²⁰.
- Infrastructure projects such as hydropower dams, oil and gas development, and mining that drive ecosystem degradation.

Policy, legal, institutional, and financial instruments for implementation

- Develop a fire risk monitoring system and an early warning system to prevent and combat forest fires, especially in years of extreme drought when fires are more likely to escape from non-forest land uses. These should be accompanied by programs stimulating alternative land-management techniques that do not use fire⁴⁰.
- Develop integrated and collaborative strategies that promote intercultural and intersectoral fire management rather than fire suppression and fire-risk adaptation strategies⁴⁰.
- Require logging concessions to implement reduced-impact logging techniques to decrease forest flammability, ensuring that the majority of the forest remains standing after logging, while establishing systems to monitor and patrol for fires near concession areas during high-risk dry periods, and promoting a sustainable forest-based economy.
- Develop basin-wide environmental impact assessments for infrastructure, such as roads, waterways, and dams, as their impacts are not only local. Planning must account for the indirect impacts of infrastructure on surrounding ecosystems, as these can outweigh direct impacts.
- Integrate forest degradation into carbon accounting systems, ensuring its inclusion in NDCs and reforming REDD+ and national greenhouse gas inventories to account for degradation-related emissions and prevent hidden carbon losses.

Processes for tracking progress, reporting outcomes, and iterative improvement

- Implement an integrated monitoring system for deforestation and forest degradation across the basin with comparable, transparent, and accessible datasets. Datasets can be generated through partnerships between governments and the scientific community.

Illustrative cases and replicable solutions

- The Forest Fire Risk Monitoring and Early Warning System ([SATRIFO](#)) in Bolivia provides useful and timely information for the prevention and control of forest fires.
- In Brazil, the [Federal Brigade Program](#), implemented by FUNAI and IBAMA through its Specialised Centre Prefogo, follows the Integrated Fire Management approach, empowering Indigenous brigades and applying prescribed burns guided by ancestral knowledge.
- In recent years, FAO and UNEP launched the [Global Fire Management Hub](#) to strengthen countries' capacity for integrated fire management and reduce wildfire impacts on people, landscapes, and climate ⁴⁵.
- The Memorandum of Understanding for Integrated Fire Management was approved by the member countries of the Amazon Cooperation Treaty Organization (ACTO) in 2021, establishing the [Amazon Network for Integrated Fire Management](#) (RAMIF) to coordinate regional fire policies and promote sustainable fire management that respects the Amazon's ecological and cultural significance, particularly for IPs and LCs.
- The [Integrated Fire Management](#) (IFM) Law was enacted by Brazil in 2024, establishing a national policy to prevent and combat fires by integrating technical, scientific, and traditional knowledge, and prohibiting the use of fire for deforestation.
- Traditional knowledge about the use of fire is being integrated through initiatives such as [PAAMARI](#). This initiative combines traditional knowledge and modern science to reduce the risk of wildfires while respecting cultural fire practices. Since its launch, the number of wildfires has dropped from 25 in 2023 to 9 in 2024, with none reported so far in 2025 — a true model of community-based climate action.
- In Venezuela's Canaima National Park, Pemón communities and scientists codeveloped a [fire management model](#) based on patch mosaic burning, which reduces wildfire risk and preserves biodiversity; this approach inspired Venezuela's 2021 national IFM platform and has been shared through Parupa Fire Intercultural Network with IPs and LCs in the north Brazil and Guyana as a scalable climate-resilient solution rooted in traditional knowledge.
- Through [participatory fire and land management](#), FAN Bolivia partners with Indigenous communities, combining traditional knowledge and modern tools—from satellite imagery to local early warning systems—to monitor fire risks, plan integrated actions, and build resilience through training, collaboration, and informed decision-making.

6. Forest Restoration to reduce the pressure on remaining forests

Diagnosis, barriers and data

- 20% of Amazon forest was deforested through time. Part of this area was abandoned after agriculture and livestock production and replaced by secondary forest. But part of this area will need to be actively restored through ecological restoration or through production systems like agroforestry and regenerative agriculture.
- The Amazon is near tipping points ^{47,48}. First and foremost, conserving existing forests is essential. In addition, scaling up restoration efforts is critical ^{49,50}.
- The "Arcs of Restoration" approach highlights that large-scale restoration potential in the Amazon is substantial, including over 100 million hectares of degraded forests that could

recover, around 24 million hectares of degraded pastures suitable for restoration, and at least 2–3 million hectares of recently deforested lands that could be restored in the short term, while preventing up to 4 million hectares of additional forest loss by 2030⁴⁹.

- Ecological restoration is essential to stop and reverse biodiversity loss and maintain ecosystem services, such as climate regulation, soil and water conservation, and the provision of forest-based products. Large-scale restoration also boosts resilience to climate change and enhances human well-being by improving environmental conditions and creating economic opportunities to give scale to an innovative socio-bioeconomy of healthy standing forests.⁵⁰
- Numerous small-scale restoration projects have been implemented, but the existing fragmented approaches to restoration cannot match the scale of the current threats to the biome's integrity, and the Amazon still urgently requires coordinated large-scale and multi-country restoration initiatives⁵¹.
- Barriers for large-scale forest restoration include: competing land uses; lack of economic incentives; weak governance and regulatory challenges; insufficient availability, diversity, and quality of seeds and seedlings of native species; costs associated with some restoration strategies (active restoration); and accessibility and monitoring.
- Mitigation initiatives in the Amazon could sequester 48 billion tons of CO₂ through forest restoration and avoid deforestation over 30 years, making it critical for achieving Paris Agreement targets under the United Nations Framework Convention on Climate Change (UNFCCC) and limiting global warming to 1.5°C⁵².
- Large-scale restoration corridors would reconnect fragmented habitats for endemic species, thus supporting global biodiversity targets of the Kunming-Montreal Global Biodiversity Framework, especially as 10%–47% of the Amazon forest faces tipping point risks by 2050⁴⁸.

Policy, legal, institutional, and financial instruments for implementation

- Restoration at scale can be achieved through seven complementary targets⁴⁹: (a) Achieve zero deforestation by 2030; (b) Avoid forest degradation; (c) Restore forests in Protected Areas; (d) Restore forests in undesignated public lands; (e) Restore areas that have been cleared above the legal allowance on private lands; (f) Restore forest cover beyond legal compliance; and (g) Sustainable restoration of degraded farmland.
- These targets can be achieved through manipulating seven different levers⁴⁹: (a) Strengthen existing public policies and develop new ones; (b) Improve implementation and enforcement of policies and support with adequate governance systems; (c) Clarify land tenure and resolve conflicts; (d) Improve the commitments and policies of the private sector and import countries; (e) Empower local communities, women, and youth; (f) Support innovation and offer technical assistance; and (g) Effective monitoring.
- Seven priority actions are required to upscale restoration in the Amazon: (1) conserve and protect primary forests; (2) promote natural forest regeneration and conserve secondary forests; (3) develop a restoration supply chain; (4) strengthen Amazonian socio-bioeconomies; (5) promote awareness, capacity building, and knowledge integration; (6) strengthen public policies and governance; and (7) secure funding for effective restoration⁵⁰.
- Ecological restoration, when combined with forest conservation, provides an opportunity to foster socio-bioeconomic development. Economic and social benefits include income generated from the production of seeds and seedlings, the implementation of restoration

projects, the cultivation of forest-based crops, and the sustainable harvest of non-timber and timber products.

- It is critical to understand restoration as a path to preserving cultures, with restoration arrangements guided by respect for local identities and autonomies.

Illustrative cases and replicable solutions

- In 2023, Brazil reaffirmed its national target to restore 12 million ha of native vegetation by 2030, a target originally established under the [National Native Vegetation Recovery Plan](#) (PLANAVERG) launched in 2017. The updated version, PLANAVERG 2025–2028, which launched in 2024, provides regulatory and strategic foundations for large-scale initiatives and carbon credit mechanisms. From an implementation perspective, the Restoration Observatory and the Amazon Restoration Alliance provide essential platforms for monitoring and coordinating restoration efforts across the Amazon.
- The [Arc of Restoration Program](#) of the Brazilian National Development Bank (BNDES): BNDES launched a program in 2023 to restore 60,000 km² of degraded Amazonian lands by 2030 with an estimate cost of US\$ 40 billion, aiming to capture 1.65 billion tons of carbon from the atmosphere, and using only with native tree species. This is a significant, large-scale financing mechanism that could be replicated across the basin. And such a plan aims at restoring an additional 180,000 km² from 2030 to 2050.
- Recent additional donations to the Amazon Fund since 2023 demonstrate strong international appetite for climate finance in support of large-scale conservation and restoration ⁵³.
- Colombia's [Payments for Ecosystem Services](#) program demonstrates how governments can incentivize restoration through direct payments to landowners and communities for forest recovery.
- [Centro de Innovación Científica Amazónica \(CINCIA\)](#)'s trials of 70+ native tree species have been used to develop reforestation protocols for ASGM-degraded lands and have catalyzed additional restoration initiatives by the Peruvian National System of Natural Protected Areas (SERNANP) ²⁸.
- [Initiative 20x20](#) (a regional public–private partnership): A country-led alliance launched at the twentieth session of the Conference of the Parties to the UNFCCC (COP 20) in Lima in 2014 to protect and restore 50 million ha by 2030, bringing together governments, investors, and technical partners across Latin America and the Caribbean.

7. Sustainable Forest Management, Socio-Bioeconomy, Agroforestry

Diagnosis, barriers and data:

For Socio-bioeconomies:

- Bioeconomies have the potential for both over-exploitation and misinterpretation. Here, we consider Amazon socio-bioeconomies as economies based around the sustainable use and restoration of healthy standing forests and flowing rivers to support the wellbeing, knowledge, rights, and territories of Indigenous Peoples (IPs) and Local Communities (LCs), as well as all Amazonian residents and the global community ⁵⁴.

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- Socio-bioeconomies include a combination of activities that maintain productive and conserved multifunctional landscapes and cultural diversity, while promoting economic and social added value to the Amazon's biodiversity and agrobiodiversity, including: the provision of numerous ecosystem services through the conservation and restoration of forest and aquatic ecosystems and the diversified production and processing of native plants (i.e., fruits, nuts, medicines), fish, and others.
- The value chains of 30 socio-bioeconomy products were found to generate USD 1.4 billion in income and employ 224,600 workers in the Amazon in 2019 ⁵⁵. It is estimated that Brazil alone could generate USD 8.2 billion per year by 2050 relative to existing economic activities by investing in socio- bioeconomies ⁵⁶. This contrasts with the relatively low returns of existing food and mineral commodities ⁵⁷.
- Barriers for the escalation of socio-bioeconomies include: a) Insufficient investments to strengthen the production strategies for socio bioeconomies, compared to those made to favour infrastructure for commodity production; b) limited financial incentives and investment mechanisms supporting sustainable forest socio-bioeconomies; c) high costs of transporting goods from remote areas (e.g., the Amazon) to markets, coupled with poor infrastructure, make products uncompetitive; d) lack of local infrastructure for processing and adding value to products; e) limited access to credit; f) meeting sanitary standards; g) knowledge gaps; h) low access to training in management and business by local communities.

For Forest Management and Timber Production⁶⁸

- Unsustainable timber harvesting model: Current extraction levels (~20 m³/ha every 15–35 years) exceed forest recovery capacity, while demand continues to grow beyond what natural forests can sustainably supply.
- Structural market and governance failures: Illegal logging creates unfair competition, weakens incentives for sustainable management, and is compounded by the lack of differentiated markets that reward responsible timber production.
- Underutilized sustainable alternatives: Secondary forests, degraded lands, and restoration-based timber systems remain insufficiently developed, despite their potential to reduce pressure on primary forests.
- Limited productivity and management practices: The absence of widespread silvicultural treatments constrains timber yields and carbon sequestration potential.
- Weak support for community forestry: Despite its potential to expand sustainable production and strengthen rural livelihoods, community-based forestry faces gaps in capacity, financing, and policy support.
- Key transition needs: Reducing logging intensity (~50%), extending cutting cycles (~60 years), scaling restoration-based production, strengthening monitoring and traceability, and investing in research and capacity building.

Policy, legal, institutional, and financial instruments for implementation:

- Redirect financial flows away from activities that drive deforestation toward sustainable agroforestry, forest management (timber and non-timber products), aquaculture, and community-led nature tourism ⁵⁷.

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- Reorient at least 20% of rural credit and public investments toward sustainable socio-bioeconomic activities by 2035¹.
- Increase international and domestic financing (e.g., climate and biodiversity funds) to support socio-bioeconomies, including investments in ecosystem services, research, and innovation. Research priorities should be co-defined with Amazonian populations and institutions to ensure local benefits. Developing regional investment portfolios can help connect small-scale initiatives with larger funding sources. There is a need to improve and adapt existing financing mechanisms by allowing: i) small or community-based enterprises to obtain loans without formalized tenure arrangements and ii) a longer-time horizon for repayment than traditional agricultural finance to accommodate the long-term nature of socio-bioeconomy investments⁵⁷.
- Develop regional hubs and educational centers to train Amazonian leaders and support biodiversity-based value chains that can compete with extractive and illegal economies.
- Adapt financing mechanisms to better serve local actors by enabling access to credit for community-based enterprises—including those without formal land tenure—and by offering longer repayment periods aligned with the timelines of socio-bioeconomy investments. Direct funding for community-managed territorial funds should also be expanded⁵⁸.
- Invest in enabling conditions, including sustainable infrastructure (transport, energy, storage, processing, and digital connectivity), as well as social technologies and micro-infrastructure that add value locally and address challenges such as perishability and seasonality. Electrification is particularly critical to reduce diesel dependence and support local processing^{57,58}.
- Digital genetic sequencing may help to provide opportunities to generate fair benefit sharing, since payments for genetic resources and environmental services are directly or indirectly tied to knowledge and management practices of IPs and LCs, yet the practicalities and asymmetries linked to this highly technical approach have yet to be addressed⁵⁸.
- Strengthen market development by creating demand for socio-bioeconomy products, improving logistics, and establishing indicators and mechanisms that recognize their added value. Tools such as traceability systems, origin certifications, and information-sharing platforms can connect producers with investors and ensure compliance with international standards⁵⁸.
- Promote governance models that go beyond product-based value chains, supporting circular, multifunctional systems that integrate biodiversity, knowledge, and community resilience. Collective governance, cooperatives, and associative schemes are essential for scaling, decision-making, and equitable benefit-sharing⁵⁸.
- Promote a self-sustained economic model that integrates ecological production calendars of the forest for the processing and commercialization of surplus during harvest periods, while identifying and sharing market and export pathways that prioritize natural markets for fruits and non-timber forest products. Encourage and strengthen socio-bioeconomies and environmental services for Indigenous peoples and local communities.

- Given that the consumption of biodiversity products is very low, culturally, specially through educational systems, the promotion of policies and practices to implement consumption of biodiversity products, regionally and globally is key^{69,70}.

Illustrative cases and replicable solutions:

- Aliança Noramazônica (ANA) has mapped [17 successful experiences of local Amazonian economies](#) implemented in 5 countries (Brazil, Colombia, Ecuador, Peru, and Venezuela).
- The school lunch program in Brazil (Programa de Aquisição de Alimentos) purchases agroforestry and small-scale aquaculture products from family producers to support food provision in schools.
- The pre-natal subsidy in Bolivia (Subsidio Universal Prenatal por la Vida) for pregnant women has increased the national market and consumption of Brazil nut and other products derived from agroforestry systems in the Amazon (e.g., cocoa).
- Latex scheme in Acre, Brazil, which helped create a stable market for rubber tappers and reduce sexually-transmitted disease through condom manufacturing
- Cooperatives and community enterprises play a decisive role in promoting socio-bioeconomy products (e.g., cocoa agroforestry cooperatives in Colombia and CAMTA in Pará, Brazil). The lessons learned from positive examples should be analyzed and discussed with other Amazonian communities to identify potential models for successful cooperative production, processing and management.
- The “[Best Practices Guide for Responsible Markets](#),” developed by the Instituto Conexões Sustentáveis (Conexsus), provides useful guidelines for businesses, especially in the Brazilian context.
- [Canopy Bridge](#) connects Amazonian producers with potential buyers through research, alliances, and a directory of products.
- The Aliados Foundation has organized the [Center for Innovation and Investment for Bioeconomy and Regenerative Agriculture in the Amazon](#), supporting a wide range of Indigenous led-enterprises.
- The [Amazon Investor Coalition](#) is a platform for collaboration on building sustainable enterprises across the Amazon.
- The Amazon Business Alliance is a coordination space for the development of businesses dependent on standing forests in the Peruvian Amazon.
- In 2015, Brazil created the [National Fund for Benefit-Sharing](#) to promote the sustainable use of genetic resources and associated traditional knowledge, increasing its capital from BRL 2.6 million in 2020 to BRL 11.2 million in 2025 through contracts with private companies.
- Brazilian national institutions such as the Genetic Heritage Management Council have been providing grants to support the emergence of biodiversity-related entrepreneurships.
- Scientists created the [Amazonia 4.0 initiative](#) to capacitate local communities to add value via bioindustrialization of biodiversity products.
- The [Bioamazonia Network](#) is a regional instrument with the mission of integrating and strengthening the capacities of its member institutes, promoting the generation and exchange of knowledge in the conservation and sustainable use of biodiversity, and the development and transfer of innovative solutions and technologies for the Amazonia bioeconomy.
- The Amazon Food&Forest Bioeconomy Financing Initiative, developed in 2024 by Impact Bank and The Nature Conservancy Brazil, provides financial support through a

fintech platform. The initiative seeks to aggregate cross-sectoral projects and foster partnerships to help promote the development of socio-bioeconomy businesses.

- In 2023, the Latin American Bioeconomy Network launched a set of guiding principles, a key tool for policies and investments that promote sustainable development in the region, facilitating knowledge sharing among member countries, including key Amazonian nations such as Brazil, Colombia, and Ecuador

8. Forest Conservation

Diagnosis, barriers and data

- Connectivity in the Amazon is essential to sustain its role as an integrated socioecological system, linking forests, water cycles, climate regulation, and human livelihoods, making the conservation of remaining forests critically important to maintain resilience at regional and global scales. As a matter of fact, forest conservation provides USD 410 per hectare in ecosystem services annually⁶¹.
- Protected Areas (PAs) cover 25.5% of the Amazon Basin and Indigenous Territories (ITs) cover approximately 28.5%, with 82% officially recognized, 11% lacking legal protection, and 7% classified as Indigenous lands (proposed or existing) or intangible zones⁵⁹.
- ITs experiences 85–92% less forest loss than adjacent unprotected areas, while deforestation inside PAs is 38–90% lower than in non-protected zones²³.
- Indigenous-led governance consistently outperforms state systems in protecting forest cover, as documented across Brazil, Bolivia, Colombia and Peru²³.
- Protected Areas remain key conservation tools, yet their effectiveness depends on their integration with surrounding landscapes, including ITs, collective lands, and undesignated public forests⁶⁰.
- There is a disconnection between political goals for forest conservation and restoration at different levels of government (national, subnational, and municipal).
- Biocultural corridors linking ITs, PAs, and community reserves can enhance regional connectivity, addressing gaps in formal conservation approaches⁶⁰.
- Relationships with territories have generated practices and knowledge that conserve shared landscapes⁶².
- For Indigenous Peoples, territory—understood in its three dimensions—is always a unified whole, wherever they may be, and one of the most vital elements for the development of human life. For example, in response, many Indigenous Territories have established processes to defend their lands by strengthening the Indigenous Guard, a movement that began in Cauca in the 1990s and has since expanded across Indigenous territories in Colombia. These groups are responsible for ensuring the protection, care, and proper management of their territories. Such organizational processes need to be strengthened in each region to help address the major environmental, social, and cultural challenges we face.

Policy, legal, institutional, and financial instruments for implementation

- Secure titling of at least 50 million hectares by 2030 for IP and LC territories, and allocate undesignated public lands to PAs and ITs¹.
- It is urgent to advance in the demarcation of territories, self-governance, territorial planning (e.g., Life Plans) and ensure Free, Prior, and Informed Consent (FPIC) in all processes that affect their territories⁶².
- Ensuring adequate long-term funding for the establishment and management of ITs and PAs, estimated at USD 1.0–1.6 billion for establishment and USD 1.7–2.8 billion per year for maintenance, is critical²³.

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- Expand mechanisms such as payments for ecosystem services to incentivize landscape conservation and restoration.
- Establish transboundary governance agreements for managing shared resources across forests, rivers and PAs and ITs corridors. A strengthened transboundary governance of conservation corridors is needed to help counter unsustainable activities, increase ecological resilience, and empower vulnerable communities.
- Build long-term capacity and support community-led monitoring of Indigenous Territories and Protected Areas through openly available data, appropriate infrastructure (e.g., monitoring, reporting, and verification processes), GPS, drones, and satellite data. Include clear metrics, adaptive funding windows, and mechanisms for rapid policy uptake.
- Interweave Indigenous and local knowledge (ILK) systems into planning and decision-making, particularly in infrastructure and territorial management, ensuring that interventions reflect cultural values and ecological realities.

Illustrative cases and replicable solutions

- Alianza Noramazónica has documented 9 experiences of [Community monitoring](#) and surveillance for territorial protection implemented in Brazil, Colombia, Ecuador, Peru, and Venezuela.
- Alianza Noramazónica has also documented 14 experiences of [governance models](#) implemented in these five countries.
- Some Amazonian governments are advancing the formal inclusion of Indigenous governance systems based on spirituality and ancestral knowledge in their national climate and biodiversity policies. For instance, in Colombia, this is reflected in the legal recognition of Indigenous Territorial Entities (ETIs) through Decree 1953 of 2014, which created a special administrative and fiscal regime, and more recently through Decree 488 of 2025, which established fiscal and operational rules for their functioning. The consolidation of the [Macroterritory of the Jaguars of Yuruparí coordination instance](#) in Colombia is an example.
- The [SIGETI](#) information system developed by four Indigenous Territories in the Colombian Amazon to govern their territories and increase their sovereignty over data
- Community-led monitoring in Brazil's Xingu Indigenous Park uses drones, GPS mapping, and field patrols to detect and deter illegal activities and complement official systems.
- Brazilian Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI), established with the objective of ensuring and promoting the protection, recovery, conservation and sustainable use of natural resources in Indigenous Territories and lands. It also aims to ensure the integrity of indigenous assets, improve quality of life and guarantee that the current and future generations of Indigenous Peoples are fully capable of physical and cultural reproduction, respecting their socio-cultural autonomy, in the terms of the legislation in force.
- The [Amazon Protected Areas Program](#) (ARPA) is a program launched by the Brazilian government in 2002 to support Protected Areas and its conservation.
- The governments of Ecuador and Bolivia have constitutionally adopted the "Living Well" model as the central axis of their environmental policies. This framework emphasizes that environmental conservation must be articulated with the maintenance of spiritual connectivity as an essential element of collective well-being, and it has influenced government programs that actively connect Indigenous knowledge systems and spirituality into territorial conservation projects.

Part III – Fostering International Cooperation and Addressing Regulatory Bottlenecks

9. Technical Cooperation, Capacity Building, Institutional Strengthening

- Regional cooperation is essential for the Amazon, as conserving and restoring its ecological and sociocultural connectivity requires coordinated transboundary action.
- The Amazon is an interconnected socioecological system, making joint governance and integrated planning across countries critical.
- Key priorities include: i) Protecting ecological corridors and Indigenous territories, ii) Aligning development (infrastructure, energy) with connectivity, iii) Strengthening transboundary conservation and monitoring systems⁷¹.
- The role of the Amazon Cooperation Treaty Organization (OTCA) is central, with milestones such as the Belém Declaration and the Bogotá Declaration reinforcing regional commitments.
- Civil society networks, such as Science Panel for the Amazon, COICA, and Red Amazónica de Información Socioambiental Georreferenciada (RAISG), play a key role in advancing connectivity. Building on earlier examples, the priority now is scaling transboundary cooperation and multi-actor coordination.
- Capacity building to address technical gaps, promote international standards' alignment, improve forest monitoring, data systems and measurement methodologies
- Strengthen scientific and institutional capacity by enhancing the ability of Amazonian research institutions to lead agendas and co-produce knowledge with IPs and LCs, supporting solutions to prevent deforestation, fire, and degradation. Initiatives in Brazil and Colombia Hubs demonstrate how science–society collaboration can transform deforestation frontiers⁷².
- Advance regional data integration and cooperation by building on platforms such as ACTO's Amazon Regional Observatory and the Amazon Network of Water Authorities (RADA) to strengthen interoperability, monitoring, and coordinated responses to transboundary challenges, while leveraging initiatives like MapBiomass and Red Amazónica de Información Socioambiental Georreferenciada (RAISG), which are expanding across the region and supporting local capacity building and training.
- Promote technical dialogue and standards alignment, strengthening technical platforms to align methodologies, improve measurement systems, and build consensus on environmental criteria before advancing policy and investment decisions.
- Enhance scientific cooperation among Amazonian countries, as well as between Amazon countries and other tropical forest regions. Examples of such collaboration include interactions among tropical forest initiatives such as the Science Panel for the Amazon, and emerging efforts in the Congo Basin and Borneo.

10. Finance, Markets, Partnerships

REDD+, Tropical Forest Forever Facility (TFFF) and results-based finance:

- Scale mobilization of public, private, and blended finance to support conservation, restoration, and sustainable land use, such as jurisdictional REDD+.

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- Expand financial incentives for conservation, including biodiversity credits, REDD+ funding expansion, and debt-for-nature swaps. At the same time, end subsidies for economic activities with high environmental costs (e.g., pasture and soy).
- Integrate forest degradation into carbon accounting systems, ensuring its inclusion in NDCs and reforming REDD+ and national greenhouse gas inventories to account for degradation-related emissions and prevent hidden carbon losses. Without this, the Amazon's true emissions footprint — including the 0.05–0.2 GtC yr⁻¹ attributable to degradation — will remain systematically underreported²³.
- Evidence consistently shows that outcome-based financial mechanisms — structured around verified forest cover retention rather than project activities — outperform traditional conservation financing in both permanence and scale. Colombia's jurisdictional REDD+ approach, Guyana's Low Carbon Development Strategy, and Brazil's Amazon Fund all point toward the same design principle: payments must be tied to measurable jurisdictional performance, with transparent satellite-based monitoring, direct access channels for Indigenous and community territories, and blended public-private structures that de-risk private investment.
- The Tropical Forest Finance Facility (TFFF) offers a paradigm shift from project-based to jurisdictional-scale financing through annual payments for standing forests, but its operation should complement — not replace — existing REDD+ mechanisms, creating layered financing architecture with clear additionality.
- Promote direct financing to Indigenous Peoples and Local Communities, guaranteeing that at least 20% of climate-related funds disbursed in the Amazon reach IPs and LCs, as they manage large areas of the Amazon and play a key role in forest stewardship.
- Design a basin-wide restoration finance architecture, aligned with the Tropical Forests Forever Facility, to blend public and private finance, mobilize multibillion-dollar flows, and guarantee direct access for Indigenous and community-led initiatives. Credit and subsidies should be reallocated away from deforestation drivers and toward forest-positive economies, aiming to restore at least 50 million hectares of degraded land, and expand ecological corridors linking Indigenous Territories and Protected Areas.

Carbon Markets:

- Climate finance is critical to harness the Amazon's environmental services for climate mitigation, adaptation, and community well-being. A range of instruments (grants, blended finance, payments for ecosystem services, carbon credits, and green bonds) can support conservation, restoration, and socio-bioeconomy models. However, current financial flows remain far below what is needed and must scale significantly to match mitigation and adaptation challenges⁶³, while ensuring alignment with the rights and needs of local populations⁶⁴.
- The land-use sector (AFOLU) holds substantial untapped mitigation potential, but global investment must increase dramatically to realize it. While voluntary carbon markets offer opportunities, their impact has been limited by concerns over additionality, governance, and declining market value, mobilizing only around USD 500 million in 2024⁶⁵.
- In contrast, broader sustainable finance instruments (such as green, social, and sustainability-linked bonds) have grown rapidly, reaching USD 6.9 trillion globally, highlighting their strong potential to mobilize capital at scale for the Amazon⁶⁶.

11. International Regulatory and Institutional Adjustments and Improvements

- Reform international trade and governance frameworks to align with zero-deforestation and sustainability goals, ensuring that global supply chains incentivize forest conservation, respect Indigenous rights, and promote equitable access and benefit-sharing of biodiversity resources.
- Strengthen transnational and national enforcement mechanisms to combat environmental crimes—such as illegal logging, mining, and wildlife trafficking—through improved coordination, monitoring systems, and judicial cooperation across Amazonian countries.
- Enhance multilateral and regional institutional capacity (e.g., through coordinated action under frameworks like Amazon Cooperation Treaty Organization) to harmonize regulations, share data, and support joint responses to cross-border environmental challenges.
- Promote fair and inclusive benefit-sharing mechanisms that recognize the role of Indigenous Peoples and local communities as stewards of biodiversity, ensuring they receive tangible economic and social benefits from conservation and sustainable use.

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