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Why the Amazon must be at the centre of global climate action

The Amazon plays an irreplaceable role in stabilizing the global climate, safeguarding biodiversity, and advancing international sustainability goals. As the largest continuous expanse of tropical forests and rivers on Earth, the Amazon biome spans over six million square kilometres across nine countries accounting for about 40% of the world's remaining forests. The Amazon provides a mix of ecosystem services that are critical at the global scale, such as its vital ecological and hydrological functions. It stores an estimated 250-300 billion tonnes of carbon³ – almost five to six times the current annual global greenhouse gas emissions. 4

The Amazon is a global hotspot of biodiversity and cultural heritage. Although it covers less than 1% of the Earth's land surface, it harbours nearly 10% of the planet's biodiversity.⁵ It is home to 18% of vascular plant species, 14% of birds, 9% of mammals, 8% of amphibians, and 18% of tropical fish. Many of these species are endemic, with around 34% of mammals and 20% of birds not found elsewhere. 6 Beyond its ecological richness, the Amazon is also home to 47 million people, including more than 2 million Indigenous Peoples (IPs) representing over 400 distinct groups.^{7,8} Their territories often overlap with areas of highest ecological integrity, underscoring their critical role in safeguarding the Amazon. IPs collectively manage more than 30% of the Amazon, and satellite evidence shows that deforestation rates in these territories are almost 50% lower than in similar surrounding lands.9

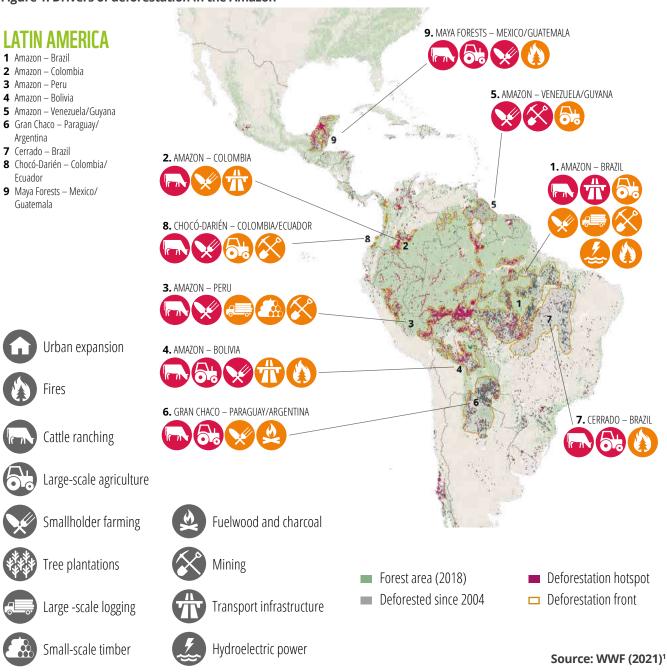
Food security and agriculture are deeply connected to the health of the Amazon. The Amazon rainforest functions as a vast "flying river," recycling moisture through evapotranspiration and transporting it across the continent, thereby sustaining agricultural

productivity in key breadbasket countries. The Amazon river is also the largest free-flowing river in the world, accounting for nearly 15% of all river discharge that enters the Earth's oceans. Keeping it free-flowing and healthy is essential, as its connectivity and water quality influence not only the river basin itself but also human health, food security, livelihoods, and the mangroves and wetlands it nourishes on its way to the Atlantic.¹⁰

Yet, recent evidence indicates that the Amazon may be approaching ¬- or even surpassing - a tipping point, with parts of the biome shifting from a net sink to a net source of carbon emissions.¹¹ The threats to the Amazon are increasing and must be halted to avoid further ecological and societal damage. Ongoing deforestation and ecosystem degradation already disrupt the hydrological cycle, heightening the risk of droughts, erratic rainfall, and declining soil fertility which in turn directly threaten agriculture and food systems in the region.¹² According to WWF's 2024 Living Planet Report, 14-17% of all Amazon forests have already been lost, and estimates suggest that a key tipping point will be reached if 20-25% is lost.¹³ This loss triggers harmful feedback loops - like increased carbon emissions, and altered regional climate through albedo changes - that threaten forest resilience.14

Deforestation and forest degradation are accelerating despite small gains in recent years. By the end of 2024, the Brazilian Amazon had lost 0.94 million hectares of primary forest. Although this marked a 13.6% increase from 2023, it was still historically relatively low, ranking the 16th highest annual loss since 2002. Several factors, including the expansion of cattle ranching and commodity crop production, are driving deforestation and forest degradation in the Amazon (see Figure 1).

Figure 1. Drivers of deforestation in the Amazon



Given the Amazon's immense influence on the trajectory of climate change, halting and reversing deforestation and forest degradation in this biome (and other forests globally) by 2030 – as outlined in paragraph 33 of the first Global Stocktake (GST) outcome decision2 – is non-negotiable for the world to be in line with

Paris Agreement targets. While governments of countries sharing the Amazon have a clear responsibility to protect, restore, and sustainably manage the biome, the global community must support them through international cooperation and integrated solutions guided by a long-term vision for the biome.

^{1.} Pacheco, P. et al. (2021). Deforestation fronts: Drivers and responses in a changing world. WWF, Gland, Switzerland.

^{2.} UNFCCC. (2023). Outcome of the first global stocktake. Retrieved from https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf.

Safeguarding the Amazon demands strong climate leadership from countries sharing it

Protecting the Amazon demands solid political leadership and commitment from governments of countries sharing it to plan, support, and coordinate strategic activities across different intervention areas. These efforts must be put at the centre of climate goals and plans as outlined in the Nationally Determined Contributions (NDCs) of governments in the region. NDCs are national climate action plans submitted by countries under the Paris Agreement, outlining their specific commitments to reduce greenhouse gas emissions and adapt to the impacts of climate change. As the platform for Parties to the Paris

Agreement to communicate their climate targets and actions, NDCs are critical entry points for climate action and must be submitted to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat every five years. To enhance ambition over time, the Paris Agreement instructs that each successive NDC of a country must represent a progression compared to its previous NDC and reflect the country's highest possible ambition. Additionally, developing countries can use NDCs to highlight their needs for relevant financial and technical support and mobilise resources for implementation.



There are several forest- and land use-related targets and policies that Amazon country governments can implement through their NDCs to conserve the biome (and others) that simultaneously help boost economies, improve rural livelihoods, bolster climate resilience, and help mitigate and adapt to climate change. Amazon countries can strengthen or include the following in their NDCs to raise ambition and action for the Amazon as well as other forests and ecosystems:



An explicit target to 'end and reverse deforestation and degradation by **2030**' as emphasised in the GST outcome decision



Ambitious GHG mitigation targets specific to the forest and land-use sector, such as tonnes of CO2-equivalent net emissions reductions from the sector relative to a baseline year



Other ambitious forest and land use-related targets, like halting deforestation, conversion, and degradation (with an explicit zero-deforestation commitment for the Amazon) as well as clear targets related to increasing ecosystem restoration, enhancing ecosystem resilience, and reducing vulnerability.



Ambitious policy measures that facilitate forest conservation, restoration, and management, and clear targets for their implementation. Such supportive actions may include forest protection, sustainable management, payment for ecosystem services, agroforestry, agroecology, regenerative agriculture, community forest management, deforestation and conversion-free supply chains, and REDD+ (Reducing Emissions from Deforestation and forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks) measures.



Policies and actions that facilitate efficient and equitable forest conservation, restoration, and management. These could include strengthening national conservation policies, improving inclusive forest governance – needed for effective enforcement of environmental regulations; management; and strengthening Indigenous Peoples' (IPs') and local communities' (LCs') land and collective rights, and aligning climate, biodiversity, and development targets across sectors with forest conservation goals.



An inclusive just transition framework that spans not only the energy sector but also industries, food systems, finance, and conservation, centred on human rights principles. This should ensure equitable opportunities for all peoples, especially IPs and LCs, by promoting decent livelihoods, social protection, capacity building, and meaningful participation in decision-making. The framework must prioritize nature-based solutions and the intrinsic value of ecosystems, fostering policies that balance economic development with ecological sustainability and social equity across sectors influencing the Amazon and other forests.

^{1.} Pacheco, P. et al. (2021). Deforestation fronts: Drivers and responses in a changing world. WWF, Gland, Switzerland.

^{2.} UNFCCC. (2023). Outcome of the first global stocktake. Retrieved from https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf.

This year's Conference of the Parties (COP) of the UNFCCC is significant: not only does COP30 take place at the edge of the Amazon, it also marks a decade since the Paris Agreement was adopted and is the deadline for the Parties to submit renewed, ambitious NDCs to put the world on

track towards the climate targets that were defined ten years ago. For Amazon country governments, COP30 is a unique opportunity to rise to the occasion and take the lead on ending and reversing deforestation in the region.

NDC Assessment Methodology

This assessment reviews the NDCs of eight Amazon biome countries to evaluate how forest-related measures and targets are integrated into their climate strategies. It includes the most recent NDC versions available as of September 30, 2025: NDC 3.0 submissions were prioritized, or otherwise the latest prior versions were analysed to evaluate the inclusion of forest-related actions, a set of key criteria –

essential for climate mitigation and adaptation and grounded in robust evidence – was established. Each NDC was manually examined against these criteria, with results systematically documented in a structured Microsoft Excel template to enable detailed, comparative analysis across all Parties. See Annex 2 for a detailed description of the assessment criteria.



Forest ambition and action in the Amazon NDCs

Despite this window of opportunity, a review of sufficiently incorporating ambitious targets, Amazon countries' NDCs as of September 30, 2025 (covering the versions that were in place by that date - whether NDCs 3.0 or previous submissions) reveals that governments are not

policy measures for forests, adequate financing, or ensuring effective participation. See Figure 2 below (see Annex 1 for the full review of each NDC):

		Brazil	Ecuador	Colombia	Bolivia	Guyana	Suriname	Venezuela
Forest Ambition	End deforestation by 2030	No	No	No	No	No	No	No
	Land-use mitigation target	No	No	No	Yes	No	No	No
	Any deforestation target	No	No	Yes	Yes	No	Yes	Yes
	Forest degradation targets	No	No	Yes	Yes	No	No	No
	Forest restoration targets	Yes	No	Yes	Yes	No	No	Yes
	Target or action on Amazon	Yes	No	Yes	Yes	Yes	Yes	Yes
Forest Policy Actions	Protected areas measures	Yes	Yes	Yes	Yes	Yes	Yes	No
	Sustainable forest management	Yes	Yes	Yes	No	Yes	No	Yes
	Payment for Ecosystem Services	Yes	Yes	No	Yes	No	No	No
	Community forest management	No	No	Yes	Yes	No	No	Yes
	Agroforestry	Yes	No	Yes	Yes	No	No	Yes
	Deforestation and conversion							
	free supply chains	No	Yes	Yes	No	No	No	No
	REDD+	Yes	No	Yes	No	Yes	Yes	No
Governance and Inclusion	Forest in MRV	Yes	Yes	No	Yes	No	Yes	Yes
	Gender considerations	Yes	Yes	Yes	Yes	No	No	Yes
	IPLC considerations	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Synergies	Biodiversity in general	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Global Biodiversity Framework or Convention on Biological Diversity	No	Yes	Yes	Yes	Yes	Yes	No
	Global Goal on Adaptation	Yes	No	Yes	Yes	No	No	Yes
	Sustainable Development Goals	Yes	Yes	Yes	Yes	No	Yes	Yes
	United Nations Convention to Combat Desertification	No	Yes	No	Yes	No	No	No

Note: Peru will be included in a future update of this analysis as it submitted its NDC 3.0 by the time of this publication.

Among the Amazon countries, Colombia and Bolivia have the most ambitious forest NDCs, with strong targets and policies for forest conservation and sustainable management. Brazil, Venezuela, and Ecuador follow with moderately robust commitments. contrast, Guyana's and Suriname's NDCs are less comprehensive, lacking detailed strategies and

specific targets. Only three countries - Brazil, Bolivia, and Venezuela - include specific Amazon-related targets or measures in their NDCs, while two countries - Colombia and Guyana – emphasize the Amazon's significance for biodiversity and cultural heritage but do not outline any clear target. The following findings provide an overview of the current state of these NDCs:

Some positive signs:



Six countries either recognise the importance of the Amazon biome or include a target, or an action related to the biome. However, these are generally weak or vague. Only Colombia's NDC 3.0 underlines halting deforestation and ensuring a living Amazon as strategic actions to meet its NDC, and to advance towards carbon neutrality, while contributing to the global goal of keeping the temperature increase below 1.5°C and conserving the biological and cultural richness of the Amazon for present and future generations. **Bolivia's** NDC 3.0 also includes a relatively clear target. The NDC mentions a "plan to promote the production, conservation, and protection of extensive areas of non-timber forest product collection and sustainable production systems (e.g., forest fruits) that promote the circular bioeconomy and contribute to avoiding deforestation and capturing carbon in territories of the Amazon and Chiquitanía, among others." However, the NDC does not explain how the plan will prevent deforestation. Brazil's NDC mentions Amazon in the context of "Arc of Restoration in the Amazon" which is an initiative announced at COP28 in 2023 and aims to bring together countries, companies and governments to restore the most vulnerable area of the world's largest rainforest with a target of restoring 6 million hectares of forest by 2030 and 24 million hectares by 2050. The NDC, however, does not include any explicit targets for ending deforestation in the Brazilian Amazon. In fact, it just mentioned that Brazil will continue to respond positively to paragraphs 33 and 34 of decision 1/CMA.1, considering achieving zero deforestation, by eliminating illegal deforestation and compensating for the legal suppression of native vegetation and the greenhouse gas emissions resulting from it.



Both protected areas and sustainable forest management measures are included in six NDCs. Colombia and Bolivia have the strongest measures for protected areas. Colombia's NDC 3.0 states that the country has a mechanism structured as a long-term (20-year) program managed by National Natural Parks that ensures the conservation and financing of 42 million hectares – approximately 20% of the country's territory – through the strengthening of the National System of Protected Areas (SINAP) and other complementary conservation strategies. Its implementation directly contributes to reducing deforestation and increasing ecosystem resilience. **Bolivia's** NDC 3.0 sets a target of "reducing deforestation in Protected Areas by 100% by 2035 compared to the baseline level". **Guyana** also has a strong target for protected areas and to develop a suite of emission reduction measures that will include the conservation of an additional 2 million hectares through the National Protected Area System and other effective area-based conservation measures as per their commitment under the UNCBD, including the protection of conservancies and reservoirs and their watersheds and the watersheds upstream of new hydro-power sites. However, this is conditional on international support. **Ecuador's** NDC includes a plan to implement comprehensive fire management actions as a forest fire prevention and management strategy, aimed at protecting and conserving natural heritage, as well as at the urban-forest and urban-agricultural interface.



IPs and LCs are mentioned in eight NDCs, representing the most frequently cited social group. Women and gender considerations appear in six NDCs. Inclusion of these groups improves climate and forest goal success, recognizing them as key forest stewards and experts under Paris Agreement objectives.^{3,4} The NDCs of Colombia, Bolivia and Venezuela have the strongest integration of IPs and LCs. Colombia's NDC recognises IPs as holders of collective rights and key players in climate action and the value of their territorial and community instruments that guide the sustainable management of natural resources and the defence of ecosystems. Bolivia's NDC recognises cultural diversity and the collective rights of IPs and incorporates the implementation of prior, free, and informed consultation and the incorporation of Indigenous life plans and worldviews into forest management and the strengthening of Indigenous territorial governance. While other NDCs in the region do mention IPs and LCs, their inclusion is mainly in the context of strengthening their capacity or their participation in developing regulations and activities that would affect them, rather than a recognition of their rights and roles as partners in action on forest and climate.



Biodiversity conservation is highlighted in seven NDCs, and alignment with Sustainable Development Goals (SDGs) is noted in six. Colombia projects its NDC 3.0 as an instrument that consolidates coherence between climate action, biodiversity conservation, and sustainable development, within the framework of the triple planetary crisis of climate change, biodiversity loss, and pollution. **Bolivia** states that actions outlined in its NDC 3.0 recognise the vital role of forests as the country's largest carbon sinks, reservoirs of unique biodiversity in the world, regulators of water cycles, and the livelihoods of the communities and IPs who inhabit them. **Venezuela's** NDC integrates biodiversity conservation, sustainable land management and climate change mitigation into Sustainable Forest Management.

^{3.} Dawson, N., Coolsaet, B., Sterling, E., Loveridge, R., Gross-Camp, N., Wongbusarakum, S., et al. (2021). The role of Indigenous peoples and local communities in effective and equitable conservation. Ecology and Society, 26(3). Retrieved from https://www.ecologyandsociety.org/vol26/iss3/art19/.
4. Renfroe, S. (2024, March 19). Centering Indigenous Women in Conservation Activities: The Vital Role of Gender Equity in Forest Conservation. WI-HER. Retrieved from https://wi-her.org/centering-indigenous-women-in-conservation-activities-the-vital-role-of-gender-equity-in-forest-conservation/.

Still long way to go to raise ambition and accelerate action:



No country's current NDC commits to ending deforestation by 2030, though five have established other deforestation targets. Colombia's NDC 3.0 establishes a goal to reduce emissions from deforestation equivalent to decreasing the deforestation rate by between 37,500 and 49,999 hectares per year at the national level by 2035. **Bolivia** also has a target to reduce deforestation outside protected areas by 80% by 2035 compared to the baseline but 80% of this target is conditional on financial support. **Suriname** and **Venezuela** have relatively weaker deforestation targets. Suriname commits to maintaining its forest cover of more than 15.2 million hectares and historical annual rates of deforestation below 0.1%, ensuring no increase to deforestation but not committing to 'ending and reversing deforestation'. And Venezuela commits to maintaining the rate of change of forest cover at 0.20%, equivalent to 90,000 hectares per year by 2030. It is important to note that international climate and nature finance constitutes an essential pillar for implementation and effectiveness of forest goals set in the NDCs of countries in the region as most of commitments by governments in the region are conditional on receiving finance and support from the international community. These NDCs also strongly advocate for concessional international finance based on the principles of shared responsibilities but differentiated responsibility among countries as finance.



Despite commercial agriculture being the main driver of deforestation in the region, only three countries have deforestation-free agricultural production or supply chain measures. However, both measures are weak given their lack of specificity. Ecuador's NDC includes a measure to promote the transformation of conventional production systems toward sustainable, deforestation-free agricultural production systems but does not set any targets or milestones to achieve this. Similarly, Colombia's NDC 3.0 states that progress is being made on implementing a national monitoring and verification system for achieving zero deforestation in the agrifood sector. However, no additional details on this progress or renewed targets are



The collective global responsibility to protect the Amazon

The Amazon's conservation is a collective responsibility of the global community.

What happens in the Amazon shapes the planet's future, and the responsibility to protect and restore the Amazon is shared. Amazon countries, industrialized nations, and international donors each have distinct roles under the principle of common but differentiated responsibilities. Inaction ensures climate collapse, food insecurity, and biodiversity loss for generations. The Amazon governments are on the frontlines and must strengthen governance through robust monitoring, crack down on illegal mining, logging, and land grabbing, and hold offenders accountable. Enforcement must be paired with ambitious policies to expand protected areas, secure Indigenous land rights, and integrate zero-deforestation goals into national climate and development plans. Crucially, these policies must show that economic growth and ecosystem protection can coexist.

Industrialized nations carry clear historical and ethical responsibilities.

Their consumption and production patterns have long driven demand for commodities like beef, soy, palm oil, and minerals – fuelling deforestation, land grabbing, and violence against Indigenous and environmental defenders. These countries must act decisively: providing scaled-up, predictable climate finance through mechanisms like the New Collective Quantified Goal (NCQG), the Green Climate Fund, and the Loss and Damage Fund; enforcing strict zero-deforestation trade and consumption policies to exclude commodities tied to forest destruction and violence; and investing in sustainable value chains, fair-trade partnerships, and technology transfer to help Amazon economies diversify and prosper without deforestation.

International donors, development banks, and philanthropic organizations can drive systemic change by providing flexible, long-term funding directly to IPs and LCs, avoiding bureaucratic barriers.

Short-term grants and pilots are insufficient to match the required finance needs. Sustained investment is essential to secure land tenure, prevent conflicts, build climate-resilient livelihoods, and strengthen community-led monitoring and restoration. Such funding must foster trust, autonomy, and agency for Amazon peoples. No credible global solution exists without fully recognizing Amazon IPs and LCs as true guardians. Forests under Indigenous stewardship in the Amazon collectively removed a net 340 million tonnes of CO₂ from the atmosphere each year from 2001-2021, whereas forests outside of the Amazon's Indigenous lands were collectively a carbon source as a result of significant forest loss. 16 Yet the expansion of agribusiness and illegal resource extraction has brought escalating violence.¹⁷ Protecting human rights and forests is inseparable: securing Indigenous territories, supporting sustainable livelihoods, and ensuring Indigenous leadership are both moral and practical necessities for safeguarding the biome.

Safeguarding the Amazon means rejecting false trade-offs between economic growth and environmental health. Zero deforestation is possible – and it is the gateway to a just transition, resilient economies, and sustainable futures. The Amazon is not only the heart of South America – it is one of the beating hearts of the Earth. Protecting it is humanity's responsibility to itself, to nature, and to generations yet to come.

Rays of Hope

Despite the immense challenges to protecting and restoring the Amazon, recent developments bring hope and optimism for the future.

Forests are expected to be at the top of the agenda in Belém at COP30, with a particular focus on securing financing for forest protection, as well as the implementation of Articles 33 and 34 of the GST, which establish halting deforestation and restoring and conserving ecosystems as a priority for compliance with the Paris Agreement, so that nature and forests are recognized as a fundamental element for climate action. 18 COP30 will see the launch of the Tropical Forests Forever Facility (TFFF), a conservation funding mechanism championed by Brazil that seeks to compensate countries for conserving tropical forests and directs 20% of funds to IPs.¹⁹ COP30 will also serve as an opportunity to bring attention and renewed momentum to other forest finance initiatives, such as the Interamerican Development Bank's Amazonia Forever program, which scales finance to coordinate and accelerate sustainable, inclusive, and resilient development in the Amazon region. This includes investments to promote bioeconomic models across the region, which are alternative economic models receiving increased attention as a mechanism for change.²⁰,²¹ Some bioeconomic models have received increasing financial backing from governments and other actors in the region.²²

Beyond progress on forest finance, several high-level forest commitments have united governments and other actors in the region in the mission to combat forest loss.

In August 2023, leaders from eight Amazon countries agreed to the Belém Declaration, which sets a common commitment to cooperate to combat deforestation and gives a renewed focus to the Amazon Cooperation Treaty Organization (ACTO) and its function as a mechanism for coordinating political priorities decision-making among Amazon states.²³,²⁴ In August 2025, the members of the ACTO agreed to the Bogotá Declaration, which reaffirms their commitment to cooperate on addressing climate, social, environmental, and economic challenges in the Amazon region.25 At this summit, leaders further agreed on the need to support implementation of the TFFF⁵ through establishing the ACTO Financial Mechanism and to strengthen dialogue between governments and local communities through the Amazon Indigenous Peoples Mechanism (MAPI). Evidence demonstrates that when adequate resources are put in place to meet forest commitments, transformative changes can be achieved. Brazil and Colombia both saw reductions in deforestation in 2023 following implementation of policies to address drivers of forest loss,26 and both have implemented additional measures intended to build upon the progress made.²⁷,²⁸

^{5.} The Tropical Forest Forever Facility (TFFF) is a large-scale, Brazil-led initiative to financially reward countries for conserving their tropical forests. It aims to be one of the world's largest blended finance mechanisms, designed to provide ongoing funding based on performance, specifically for maintaining deforestation rates below a 0.5% annual target. Expected to be officially launched at COP30 in Belém, Brazil, the TFFF will use funds from governments and private investors to pay participating countries for preserving their forests

Achieving lasting progress on reducing forest loss in the Amazon will require coordinated and holistic strategies with clear targets.

WWF's Amazon Push framework outlines three specific proposals to guide governments and other key stakeholders in these efforts.²⁹ First, it calls for measures and policies to ensure that local communities can benefit from zero deforestation and conversion, for example

through the scaling up of local bio-economies and other initiatives that promote sustainable livelihoods, respect for their rights, and ecosystem conservation. Next, it calls for the eradication of illegal gold mining, which poses a significant and growing threat to communities and ecosystems in the region.³⁰ Lastly, it calls for the conservation of at least 80% of Amazon forests, wetlands, and rivers through strengthening of Indigenous territorial governance and transformative financial mechanisms, among other measures.

Recommendations for integrating ambitious action on the Amazon in NDCs

The NDC assessment identifies urgent opportunities for Amazon countries to strengthen forest-related targets by tackling deforestation, degradation, and biodiversity loss, while improving commitment, ambition and transparency. Key needs include capacity building, financial support, and political will to implement forest protection, restoration, and sustainable management. It also highlights the crucial role of IPs and LCs as stewards of the forest, whose rights and knowledge must be fully recognized and integrated into climate actions.

The following six recommendations can help policymakers in the Amazon region improve the setting of forest-related targets, enhancing synergies between climate, forest, and biodiversity goals, and strengthening capacity and resource availability. It is crucial that these recommendations are understood within the diverse national contexts and economic realities of Amazon countries, which continue to shape the challenges and opportunities for effective forest conservation and sustainable development in the biome.

1. Assess drivers of deforestation and ecosystem conversion

Understanding the root causes of deforestation in the Amazon is essential for effective conservation and restoration strategies. Equally important are the underlying economic policies, weak governance, insecure land tenure, inequalities, poverty, violence, rural population growth, and global market demands that drive these impacts. Ignoring these systemic factors risks addressing only visible symptoms, leading to short-term gains but failing to stop long-term deforestation. A thorough analysis must consider both direct and indirect drivers, track deforestation from imported commodities, identify barriers in forest-risk sectors, and assess leakage where protection shifts pressures elsewhere.

- **1.1** Implement a One Health framework to address deforestation, recognizing that protecting forests, wetlands, savannas and Indigenous rights is essential for the health of Amazon ecosystems and local communities.
- 1.2 Legally recognize and support Indigenous and community territories as vital natural barriers to deforestation. Complement this recognition with strengthened governance, sustainable practices, and the promotion of bioeconomy and community-driven sustainable development, which are essential for effective conservation and long-term resilience.
- 1.3 Harmonize and advance regional strategies to enhance traceability of timber and other forest commodities, disrupting illegal logging and blocking deforestation-linked products from entering value and export chains, thus reducing forest degradation, and promoting sustainable land use.
- **1.4** Transform agricultural systems to ensure deforestation- and conversion-free value chains, with incentives for sustainable production, regenerative practices, and traceability mechanisms from the source.
- **1.5** Strengthen the Amazon Alliance against Deforestation by implementing a comprehensive regional action plan via the ACTO Mechanism and other regional entities, supported by dedicated financing mechanisms and coordinated joint monitoring that integrates efforts across government, local communities, and international partners.

2. Set ambitious, specific, time-bound targets and identify key policy forest measures

Clear, measurable goals with defined deadlines are essential for effectively protecting the Amazon's forests and biodiversity. They are much more impactful than broad or vague commitments. Specific targets help policymakers identify key interventions, integrate them into national development plans, and prioritize and implement intersectoral measures across all levels of government – from local to national. These goals also enable efficient resource allocation and the setting of clear milestones to safeguard this vital ecosystem. Equally important is the implementation of policies tailored to the Amazon's unique social and ecological context. This includes strengthening protected and conserved area regulations, enhancing inclusive forest governance, supporting community forest management by IPs and LCs, enforcing deforestation-free commodity supply chain standards, and fully recognizing Indigenous land and collective rights.

- 2.1 Make zero deforestation a core commitment within NDCs, explicitly linking it to the protection of Indigenous territories, wetlands, savannas, and other critical ecosystems, as well as to climate justice and the transition toward sustainable development pathways. This prioritizes ecosystem conservation as both a climate mitigation strategy and a rights-based agenda.
- 2.2 Enhance NDC ambition by fully aligning with the GST and Glasgow Leaders' Declaration (GLD) commitments to halt and reverse deforestation by 2030. Replace general commitments with clear, measurable zero-deforestation targets supported by defined timelines to ensure accountability and progress.

- 2.3 Design targets using the SMART framework to ensure they are specific, measurable, achievable, relevant, and time bound. Cover key areas including deforestation, forest degradation, restoration, primary forest conservation, protection of key biodiversity areas, and the conservation of wetlands and savanna ecosystems.
- 2.4 Set and progressively raise ambitious targets to eliminate deforestation and associated emissions in commodity supply chains, with a focus on consumer countries. Complement these targets with mandatory policies requiring transparent disclosure of risks and impacts on forests, wetlands, savannas, and other ecosystems.
- **2.5** Agree on binding regional targets to conserve at least 80% of the Amazon biome, including priority ecological corridors and Indigenous territories.

3. Deploy financing and implement priority forest-based interventions

The financing gap for forest conservation remains a major obstacle to translating policy commitments into concrete action, as current funding is far below what is needed to rapidly halt deforestation and restore degraded landscapes. This urgent need for increased support and investment is recognized in paragraph 34 of the Global Stocktake. Closing this gap requires innovative financing approaches that blend public and private resources, compensate for ecosystem services, scale proven conservation models, and eliminate harmful subsidies that fuel deforestation – subsidies that often exceed the resources allocated for forest protection.

- 3.1 Prioritize national resources for forest-based solutions that simultaneously advance climate mitigation, adaptation, and biodiversity conservation. Redirect public funding away from activities driving deforestation, wetland drainage, savanna conversion, and ecosystem conversion toward forest protection and restoration, ensuring just and equitable transitions for affected communities.
- **3.2** Clearly specify financial needs for conditional forest-related targets in NDCs, including detailed budget estimates for protection and restoration of forests and other ecosystems, to improve transparency and access to climate finance.
- **3.3** Use a diverse mix of financial instruments grants, low-interest loans, green bonds, and blended finance combined with regulatory measures to incentivize forest conservation and sustainable investments.
- **3.4** Implement policies that de-risk private forest investment, including clear regulations for emerging financing mechanisms and scalable demonstration projects.
- **3.5** Establish a regional registry of territorial needs and climate investment priorities in collaboration with IPs and LCs. Embed territorial equity and intercultural principles in national allocations of international climate funds to ensure inclusive and fair resource distribution.



4. Ensure forest targets align with and strengthen ambition across NDCs, NAPs, NBSAPs, and other national commitments

Forest targets must be aligned and integrated across NDCs, NAPs, NBSAPs, and other national commitments to avoid policy fragmentation, which hinders progress due to climate and biodiversity policies being developed in separate, uncoordinated ministries. This siloed approach leads to inefficiencies, duplicated efforts, and potential conflicts between policies, thereby weakening overall national climate and environmental ambitions. A coordinated, integrated approach across all relevant planning processes is essential to effectively address the scale and urgency of environmental challenges and ensure that national strategies mutually reinforce rather than contradict each other.

- **4.1** Establish explicit linkages between forest-related targets and policies across NDCs, NBSAPs, NAPs, and SDGs, and other ecosystem frameworks to identify synergies, reinforce complementary actions, capacities, resources and proactively manage potential trade-offs.
- **4.2** Acknowledge and prioritize targets and interventions concerning deforestation-free commodity (DCF) supply chains, the conservation of primary forests, and key biodiversity areas (KBAs), and other critical ecosystems, emphasizing their essential role in curbing deforestation and forest degradation.
- **4.3** Enhance and integrate governance-strengthening, law enforcement and regional cooperation measures, aimed at tackling the root drivers of deforestation and degradation, while ensuring coordinated implementation of policies that effectively reconcile trade-offs between forest-risk sectors and the conservation of forests and other ecosystems.





5. Establish inter-ministerial coordination mechanisms, strengthen cross-sectoral policy synergies, and build institutional capacity and technical knowledge for sustained action.

Advancing forest goals is a cross-sectoral challenge involving livestock, agriculture, energy, mining, transportation, trade, and economic development. However, sectoral organization often hinders coordinated action for forest protection. Effective inter-ministerial coordination needs clear frameworks defining roles, joint planning and budgeting, and shared monitoring systems across sectors. Additionally, governments often lack the capacity to update NDCs, NAPs, and NBSAPs, access funding, implement policies, and conduct monitoring, reporting, and verification (MRV). This is worsened by insufficient finance, limited ability to assess needs, high staff turnover, limited training, and weak knowledge management. Sustained investment in training, knowledge sharing, and collaboration is vital to build lasting forest conservation solutions.

5.1 Establish or strengthen multi-level collaboration mechanisms between subnational and national governments to integrate forest wetlands, savannas, and other ecosystems into national development plans and subnational development and land use plans, ensuring coordinated policy coherence and joint action.

- **5.2** Develop centralized databases and interactive platforms to facilitate the sharing of collected data, information on initiatives, and stakeholder networks across ministries and departments, enhancing transparency and informed decision-making.
- **5.3** Allocate dedicated funding for civil servant capacity building, implement effective retention strategies to reduce staff turnover, and institutionalize expertise documentation to preserve knowledge across political cycles.
- **5.4** Design training programs where trained policymakers and civil servants disseminate materials and knowledge internally to cost-effectively build widespread institutional capacity.
- **5.5** Integrating nature-based solutions to develop productive forest mosaic strategies within a land use planning framework that defines agricultural boundaries, connects habitats, restores watersheds, protects forests, safeguards community rights, and promotes sustainable forest management and financing.
- 5.6 Incorporate local and traditional knowledge related to climate, biodiversity, and forests into national planning and policy frameworks to enhance their accuracy, relevance, and cultural appropriateness.

6. Integrate and operate MRV systems to monitor forest outcomes

MRV systems enable governments to track progress toward climate and conservation targets, identify successful interventions, and report on their results. The most effective monitoring systems integrate multiple data sources such as satellite imagery, field observations, and community knowledge, actively engage IPs and LCs as monitoring partners and are designed from the outset to support specific policy decisions related to forest protection, sustainable and inclusive land management, and biodiversity conservation rather than simply generating data for its own sake.

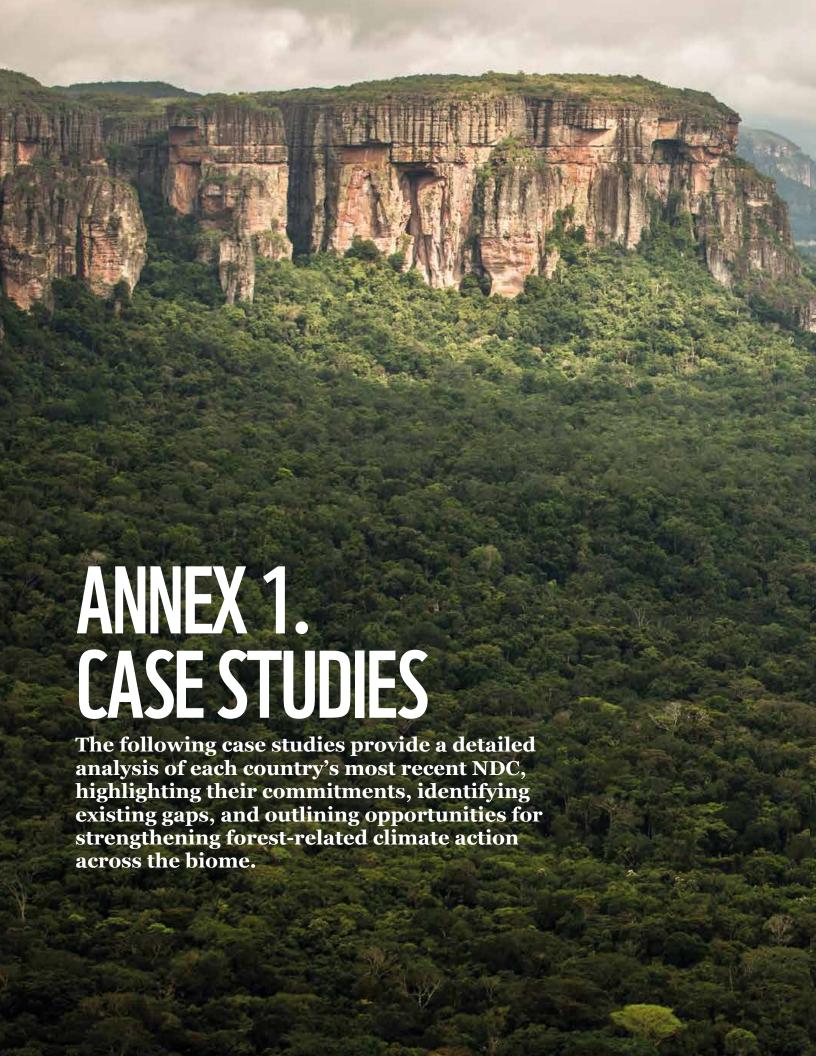
- **6.1** Create common monitoring systems that enable simultaneous reporting on climate, biodiversity, and forest goals, minimizing duplication between NDC and NBSAP reporting requirements.
- **6.2** Define measurable indicators that cover activities, immediate outputs, and longer-term outcomes for mitigation, adaptation, and biodiversity goals.
- **6.3** Develop systems that can be implemented by rural and local communities, incorporating traditional knowledge to enhance accuracy and relevance.

7. Establish a human rights-based approach to climate mitigation and forest conservation

Protecting the Amazon and the rights of its inhabitants and defenders requires approaches grounded in the recognition and enforcement of human rights. Lasting protection depends on securing safe and just territories. Violence, environmental crimes, and socio-environmental conflicts not only cause loss of life but also

undermine governance, disrupt ecological connectivity, and hinder the path toward a sustainable future for the biome. Achieving territorial justice and decisively addressing these threats are essential to maintaining ecological balance, safeguarding collective rights, and preventing irreversible damage. The security and conservation of the Amazon must be embraced as a shared regional responsibility involving all stakeholders.

- 7.1 Establish regional early warning systems for socio-environmental conflicts that are integrated into national platforms and jointly managed by States, IPs and LCs and civil society.
- **7.2** Ensure civil society organizations participate effectively in the Special Commission on Public Security and Cross-Border Crimes as observers, with access to secure reporting channels and the ability to monitor, provide technical assistance and advocate.
- 7.3 Strengthen regional monitoring of environmental crimes and violence against defenders through the Amazon Regional Observatory (ORA) and its defenders' module, including specific risk indicators and assessment of impacts differentiated by gender, age, and ethnicity, while promoting coordination among national platforms.
- 7.4 Create/strengthen systems for the protection of human rights defenders in environmental matters in accordance with the obligations of countries established in the Escazú Agreement, improve mechanisms for access to justice and environmental information, including key aspects such as equal opportunities and non-discrimination.
- **7.5** Establish specialized prosecutor's offices, attorney general's divisions, and dedicated units to address environmental crimes in each Amazon country, with cross-border coordination, strategic information sharing, and joint training focused on intercultural respect and human rights.







Brazil (NDC 3.0)



Role of forest in climate and biodiversity action in Brazil

Brazil has a territorial surface of approximately 836 million hectares,³² of which approximately 497 million hectares are covered by native forests and other wooded vegetation.³³ Of this total, two thirds is formed by the Amazon forest and the rest by transition forests, Cerrado, Caatinga, Pantanal, Atlantic forest and its associated ecosystems.34 Between 2019 and 2023, Brazil lost around 8.5 million hectares of native vegetation, 52% in the Amazon and 39% in the Cerrado.35 The leading driver of deforestation in the Brazilian Amazon is livestock farming, followed by road expansion. Large scale agriculture, particularly soy production, is another significant driver. Additional pressures include illegal logging and mining, an increase in wildfires – often aggravated by severe droughts – and weakening governmental enforcement of environmental protections in recent years.³⁶

The Amazon in the NDC

The Arc of Restoration plays a crucial role in Amazon-specific efforts highlighted in the NDC, covering fifty municipalities across seven states, prioritizing conservation units, Indigenous lands, quilombola territories, settlements, undesignated public areas, and family farms. Each managing partner supervises a macro-region, collectively overseeing R\$450 million from the Amazon Fund as non-reimbursable resources, reflecting a sizable investment in regional forest management.

Forests in the NDC

The review of Brazil's NDC reveals an economy-wide mitigation target to reduce net GHG emissions by 59 to 67% below 2005 levels by 2035, corresponding to emissions between 1.05 and 0.85 Gt CO2-equivalent. On land use change, Brazil proposes a zero-deforestation target based on compensation, which allows for the continuation of legal deforestation well into the 2030's - therefore, the NDC states that President Lula's pledge to zero deforestation and degradation in all biomes by 2030 will not be met. The amount of allowed deforestation will depend on the chosen mitigation scenario, and as seen above, both targets do allow for high deforestation levels, less so in the 0.85 Gt CO2-equivalent lower boundary. forest-related ambitions are embodied in: (i) implementing actions related to land use and forests are the Plans for the Prevention and Control of Deforestation in the Biomes including the Legal Amazon (PPCDAm) and Cerrado (PPCerrado); (ii) the Arc of Restoration, aiming to restore 6 million hectares of forest by 2030 and 24 million hectares by 2050, and (iii) the implementation of the National Plan for the Recovery of Native Vegetation Planaveg to achieve the recovery of 12 million hectares by 2030. Notably, Brazil references paragraphs 33 and 34 of the GST, which no other Amazon country does.



The NDC lists key forest-related policies covering both mitigation and adaptation, including protected area management, sustainable forest management (SFM), payments for ecosystem mangrove conservation, services (PES), agroforestry, REDD+, and deforestation-free commodity (DCF) supply chains. These policies are implemented under various national frameworks such as the Act for Ecological Transformation, which strengthens validation and inspection of protected areas, and the Restore the Amazon initiative, which promotes ecological restoration with native species and agroforestry across seven states in the restoration arc. The National Plan for the Recovery of Native Vegetation (Planaveg) further supports native vegetation recovery through environmental service payments. These initiatives demonstrate a policy architecture aimed at forest conservation and restoration, but their implementation and impact remain to be clearly demonstrated in emissions terms.

Brazil will continue to promote the monitoring and control of deforestation and of forest degradation, supported by national technologies, such as the DETER/PRODES satellite monitoring systems of the National Institute for Space Research (INPE) activities. Also, the NDC highlights the role of women and IPs and LCs in forest management and conservation. Brazil's NDC recognizes the critical role of forests in

biodiversity conservation but does not explicitly reference the Convention on Biological Diversity (CBD) or the Global Biodiversity Framework (GBF). It also omits connections to National Adaptation Plans (NAPs) and the United Nations Convention to Combat Desertification (UNCCD), though it does mention the Global Goal on Adaptation and the Sustainable Development Goals (SDGs). This partial integration with global frameworks indicates missed opportunities for harmonized policies addressing the interlinked issues of climate change, biodiversity loss, and land degradation.

Brazil's NDC reflects economy-wide mitigation goals and includes important forest-related initiatives, yet it reveals critical weaknesses in the absence of concrete, and sector-specific emission reduction targets. Moreover, the limited alignment with key international environmental frameworks weakens the coherence and potential synergies necessary for comprehensive climate and biodiversity outcomes. To elevate its NDC's impact and credibility, Brazil must embed clear forest-sector targets, develop robust MRV mechanisms, and strategically align with global conventions and frameworks, underlining its responsibility as the primary custodian of the Amazon and its central role in advancing global climate and biodiversity objectives.



Bolivia (NDC 3.0)



Role of forest in climate and biodiversity action in Bolivia

Bolivia has a territorial surface of approximately 109 million hectares,³⁸ of which around 50.8 million hectares are covered by native forests and other wooded vegetation. The country's forest areas mainly include Amazon rainforest, Chiquitano dry forest, and Andean Yungas Forest, alongside extensive savannas, and dry valleys.³⁹ Deforestation rates in Bolivia have increased by 259% over the last eight years. In 2024, Bolivia lost 1.75 million hectares of natural forest, equivalent to 544 Mt of CO₂ emissions.⁴⁰ Cattle ranching, mechanized cultivation (mainly soybean) and small-scale agriculture are the main proximate causes of deforestation in the country.⁴¹

The Amazon in Bolivia's NDC

The NDC commits to promoting the production, conservation, and protection of large areas dedicated to non-timber forest product harvesting and sustainable production systems. These initiatives support a circular bioeconomy, help prevent deforestation and enhance carbon sequestration in regions such as the Amazon and Chiquitanía.

Forests in Bolivia's NDC

Bolivia's NDC presents a highly ambitious, multidimensional strategy for the forest sector. In its 2035 vision, Bolivia states a vision for a strengthened forest sector, guardian of life and driver of the bioeconomy. It does this by clearly outlining a forest target that aims to cumulatively reduce at least 670 million tons of CO₂ emissions in the forestry sector by 2035, through the sustained reduction deforestation, the decrease in the area affected by wildfires, the net increase of one million hectares of forest cover, and the expansion of certified sustainable forest management, thus contributing to maintaining and increasing the national capacity for carbon sequestration and advancing towards the goal of net zero emissions by 2050. To achieve this long-term vision, the NDC outlines seven forest targets, most of which are partially conditional on international support:

- By 2035, reduce deforestation outside protected areas by 80% compared to the baseline.
- By 2035, achieve zero deforestation in protected areas compared to the baseline.
- By 2035, reduce the area affected by forest fires by 60% compared to the baseline.
- By 2035, double the area of forests under integrated and sustainable management, strengthening their resilience to climate change.



- By 2035, increase forest cover by 1 million hectares through restoration, afforestation, and reforestation.
- By 2035, double the production of authorized timber, bolstering local economies as a climate response measure.
- By 2035, double the production of non-timber forest products, enhancing livelihoods and resilience for local producers.

The NDC emphasizes forest governance through the restoration and conservation of key landscapes, enforcing regulations, and promoting community oversight. It supports awareness campaigns and results-based payments that recognize forests as carbon sinks and provide community benefits. Strengthening community-based forest management, especially involving Indigenous peoples, is a priority. The NDC promotes agroforestry in degraded areas to combine economic and ecological gains. Additionally, Bolivia commits to developing a transparent, multisectoral MRV system aligned with IPCC guidelines to monitor mitigation and adaptation efforts. By 2035, the country aims to boost resilience for 400,000 agricultural producers through enhanced climate risk management and strong MRV and MEL systems.

A distinctive element of the NDC is its promotion of gender equality by ensuring women's participation, access to resources, and inclusion in forest management decision-making. It also recognizes Indigenous peoples' rights through free, prior, and informed consultations, the integration of their worldviews into forest management, and the strengthening of Indigenous territorial governance. The NDC emphasizes the vital role forests play as reservoirs of unique biodiversity, regulators of water cycles, and providers of livelihoods for communities and Indigenous peoples. Additionally, it references global frameworks such as the GBF, GGA, and SDGs, and specifically links to articles on national action programs, technology transfer, capacity building, and financing.

Bolivia's NDC presents strong forest sector ambitions but contains gaps that could limit its full potential. The reliance on international support for most targets creates uncertainty around consistent financing implementation. While community involvement and governance are emphasized, the NDC would benefit from clearer frameworks ensuring equitable benefit-sharing, conflict management, and incorporation of traditional ecological knowledge into forest management. Greater integration of forest climate actions with agricultural and land-use planning could also help maximize synergies and resilience. Finally, more targeted policies and enforcement are needed to address deforestation drivers outside protected areas, such as illegal logging and agricultural expansion, to ensure measurable forest conservation progress.



The Amazon in Colombia's NDC

Colombia's NDC does not set a specific target for the Amazon; however, it emphasizes that halting deforestation and maintaining a living Amazon are strategic priorities. These actions are essential to achieving the NDC commitments, advancing carbon neutrality, and supporting the global goal of limiting temperature rise to below 1.5°C, while safeguarding the Amazon's biological and cultural wealth for current and future generations.

Forests in Colombia's NDC

The review of Colombia's NDC reveals a robust economy-wide mitigation target aiming to limit emissions to a maximum of 155 to 161 Mt CO2-equivalent by 2035. This target is supported by three specific goals for the forest sector: reducing the deforestation rate to 50,000 hectares per year by 2030; conserving one million hectares of commercial forest plantations on degraded soils by 2035; and restoring one million hectares by 2030 (cumulative since 2015), with an allocation of 80% for passive restoration and 20% for active restoration. For the 2031–2035 period, a minimum annual restoration rate of 68,684 hectares is to be maintained.

The NDC details key forest-related policies encompassing both mitigation and adaptation measures, including protected area management, sustainable forest management (SFM), forest governance, community forest management, mangrove management, agroforestry, REDD+, and zero deforestation commodity supply chains. For instance, it highlights that policy instruments have been designed to halt deforestation and promote sustainable forest management by addressing agents and drivers through strengthened forest governance, sustainable production processes, community involvement, and enhanced forest monitoring, which now explicitly includes degradation. Moreover, it indicates ongoing efforts to systematically implement the

Colombia (NDC 3.0)



Role of forest in climate and biodiversity action in Colombia

Colombia has a total land area of about 111 million hectares, 42 with approximately 59.1 million hectares covered by forests. 43 Forests occur in all the five main biogeographical or natural regions of the country but are found in greater proportion in the Amazon and Andean regions, followed by the Pacific, Orinoquía, and Caribe regions. In 2024, Colombia lost 198,000 hectares of natural forest, equivalent to 114 Mt of CO₂ emissions. 44 The main causes of deforestation in the country are the expansion of the agricultural frontier, illegal extraction of minerals, infrastructure expansion, logging, and fires. 45

post-disaster Environmental Damage and Needs Assessment (EDANA), with a focus on protected areas and strategic ecosystems such as mangroves, moorlands, wetlands, flooded savannas, and tropical dry forests.

Colombia's NDC does not explicitly reference MRV systems for forest activities but highlights the vital role of women, IPs and LCs in forest management and conservation. It acknowledges historical inequalities that increase their climate vulnerability and limit access to resources and decision-making. The NDC values Indigenous life plans and community tools for sustainable management and ecosystem resource protection. Its National Adaptation Priorities focus on reducing the vulnerability of protected heritage to climate risks, integrating disaster risk reduction and adaptation actions co-designed with traditional knowledge holders, including Black Peoples, Afro-descendants, Raizales, Palenqueros, IPs, and LCs.

The NDC consolidates climate action, biodiversity conservation, and sustainable development,

addressing the triple planetary crisis of climate change, biodiversity loss, and pollution. It references global frameworks such as the GBF, NBSAPs, GGA, SDGs, and NAPs, while notably excluding explicit mention of the UNCCD.

Colombia's NDC presents a strong and comprehensive framework with ambitious targets to reduce deforestation, restore forests, and promote sustainable forest management, all nested within an economy-wide mitigation goal. It notably includes references to community forest management and forest governance, emphasizing local participation strengthened oversight. The NDC also integrates social dimensions by recognizing the critical roles of women, Indigenous Peoples, and Local Communities, while linking climate action with biodiversity and sustainable development priorities. Nonetheless, key gaps remain. The absence of references to MRV systems for forest activities limits transparency and progress tracking. Addressing these gaps offers important opportunities to enhance the NDC's ambition, coherence, and effectiveness.





in protected Amazon areas), infrastructure development, logging, and fires.⁴²

In its NDC, Ecuador incorporates the forest sector within the category Land Use, Land-Use Change and Forestry (LULUCF), recognizing that deforestation – driven by the expansion of agricultural and livestock frontiers – constitutes one of the country's main sources of emissions, while forests simultaneously serve as a key mitigation tool.

Accordingly, the NDC defines eight concrete lines of action for the LULUCF sector: forest conservation and restoration; expansion of sustainable protected areas; management; sustainable forest plantations; control and enforcement; forest deforestation-free productive transition; integrated fire management; and direct incentives for landowners and communities (including Indigenous peoples and nationalities) located in areas at high risk of deforestation and degradation.

Ecuador (NDC 3.0)



Role of forest in climate and biodiversity action in Ecuador

Ecuador has a total land area of about 24.8 million hectares⁴⁶, with approximately 12.55 million hectares of its territory, covered by forests.⁴⁷ Ecuador's forests include the Amazon rainforest (62%), Montane forests in the Andes (21%), and tropical rainforests in the Pacific coastal plains (17%).⁴⁸ Between 1990 and 2022, Ecuador lost a significant portion of its natural forest cover. During that period, the country went from having 14.5 million hectares to 12.1 million hectares, representing a 16.9% reduction.⁴⁹ The main drivers of deforestation include agricultural expansion, especially for cocoa and oil palm, mining activities (including

The Amazon in Ecuador's NDC

Ecuador's NDC does not assign a specific, quantifiable, and verifiable target to the forest/LULUCF sector (for example, a defined reduction in deforestation or a set number of hectares under sustainable management). Detailed targets are expected to be established in the updated REDD+ Action Plan in 2025, which will then be incorporated into the NDC.

This creates a critical gap for the Amazon region, which contains a large share of Ecuador's forest wealth and serves as the country's main freshwater reserve, supporting Indigenous territories and local economies.

In practice, this means that the Amazon is treated as the geographic space where the LULUCF sector's lines of action are implemented, yet it is not formally recognized with a sectoral climate target or designated as a "strategic forest economic sector" – one with explicit responsibilities, dedicated financing, and

measurable results comparable to those established for the Energy or Agriculture sectors.

While the Amazon's significance for biodiversity is acknowledged, the NDC does not specify targets or measures for this region.

Forests in Ecuador's NDC

The review of Ecuador's NDC reveals that although the country has set an economy-wide mitigation target to reduce GHG emissions by 7% (approximately 8,800 kt CO2-equivalent) by 2035 unconditionally, based on 2010 levels, and aims to increase this reduction to 8% (around 10,600 kt CO2-equivalent) with international support, this ambition is not matched by equally specific forest-sector targets, that lead to reducing degradation and deforestation, and to increasing forest restoration or sustainable management. Ecuador's NDC emphasizes the importance of MRV systems to advance forest conservation, restoration, sustainable management, and monitoring. It also highlights gender as a central pillar and stresses promoting land legalization in protected areas to secure Indigenous Peoples' collective rights and

recognize their vital role in conserving the country's natural heritage. Furthermore, the NDC aligns with and is guided by global frameworks, including the GBF, NAPs, UNCCD, and the SDGs.

Despite having an overall mitigation target and highlighting key forest -related policies, a significant gap in Ecuador's NDC is the lack of quantified, measurable targets specifically for the forest sector, which limits tracking and accountability for sectoral contributions to overall emission reductions. Strengthening the NDC could involve setting clear, time-bound targets for forest carbon stocks, deforestation rates, and restoration areas, particularly in critical ecosystems like the Amazon. Enhancing integration of Indigenous Peoples' knowledge and leadership beyond land tenure recognition, mainstreaming gender-responsive approaches in implementation strategies, would improve inclusivity and effectiveness. Additionally, aligning forest interventions more explicitly with climate resilience goals and developing robust, transparent monitoring and evaluation mechanisms will reinforce Ecuador's capacity to meet and scale its forest sector ambitions.





Venezuela (NDC 2.0)



Role of forest in climate and biodiversity action in Venezuela

Venezuela has a total land area of approximately 88.2 million hectares⁶, with approximately 46.2 million hectares covered by forests.⁷ Most of Venezuela's tree cover is found in the southern states of Bolívar and Amazonas, with smaller amounts of tree cover found in the states of Delta Amacuro, Zulia, and Apure.⁸ In 2024, Venezuela lost 153,000 hectares of natural forest, equivalent to 64.8 Mt of CO₂ emissions.⁹ The majority of tree cover loss in the country from 2001 to 2024 was driven by permanent agriculture, followed by wildfire and shifting cultivation.⁵¹

The Amazon in Venezuela's NDC

As an adaptation measure under the Ecosystem sector, the NDC mentions the aim to develop land use plans for several states, including the Amazon state.

Forests in Venezuela's NDC

Venezuela's NDC sets an overall economy-wide emissions mitigation target of reducing GHG emissions by 20% by 2030 as compared to BAU. However, the NDC does not set an AFOLU/LUCF mitigation target nor a forest-related sectoral mitigation target. In general, the NDC is quite light on setting forest-related targets. Mitigation-related targets are set for deforestation (maintain the rate of change of forest cover at 0.20%, equivalent to 90,000 hectares/year by 2030), forest restoration (restoration and regeneration of 3,000 hectares of forests), and sustainable forest management (sustainable forest management through new participatory management tools covering at least 166,634 hectares of forests and resulting in stabilized populations of endangered forest species of global importance and avoiding the emission of 24 million tons of CO2-equivalent and halting land degradation processes). The NDC highlights key forest-related policies including ones related to SFM, community forest management, agroforestry, and mangrove management. As a key component of its SFM strategy, the NDC mentions the design and initial implementation of a national forest certification program.

Venezuela's NDC highlights its National Integrated Forest Information System (SINIB) as a mechanism for monitoring and evaluation of its forest ecosystems. The NDC incorporates gender and equity as key elements of the national sustainable development framework. It also includes measures and targets to strengthen Indigenous governance and rights, including through capacity-building support for IPs and LCs in the Imataca Forest Reserve and support for economic development based on



Indigenous customs and production systems. The NDC recognizes the importance of biodiversity conservation but does not specifically mention alignment with key biodiversity-related frameworks/strategies such as the CBD, GBF, or its NBSAP. The NDC does, however, explicitly mention alignment with the GGA, SDGs, and the country's NAP.

Despite the inclusion of some forest targets and policies, Venezuela's NDC could benefit from additional measures related to, for example,

protected areas, payments for ecosystem services, and REDD+. Further, it could add more forest-relevant adaptation targets and measures; the NDC's mitigation section includes a sun-section for the forest sector, but the adaptation section does not include a section specifically for forestry. Additionally, the NDC could provide further information on how forest targets and policies will be evaluated. While the NDC mentions the SINIB as a monitoring mecanism further details could be provided for MRV of specific targets and measures.

^{6. 2022} deforestation statistics for Venezuela. (n.d.). World Rainforests. Retrieved October 14, 2025, from https://worldrainforests.com/deforestation/archive/Venezuela.htm.

^{7.} FAO. (2020).

^{8. 2022} deforestation statistics for Venezuela. (n.d.).

^{9.} Venezuela Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/country/VEN?category=undefined.



Role of forest in climate and biodiversity action in Guyana

Guyana (NDC 1.0)

Guyana has a total land area of approximately 19.7 million hectares, with approximately 18.41 million hectares covered by forests.⁵⁷ Most of Guyana's tree cover is found in the regions of Upper Takutu-Upper Essequibo, Cuyuni-Mazaruni, East Berbice-Corentyne, Barima-Waini, and Potaro-Siparuni.⁵⁸ In 2024, Guyana lost 104,000 hectares of natural forest, equivalent to 45.7 Mt of CO₂ emissions.⁵⁹ The single largest driver of tree cover loss in the country from 2001 to 2024 was wildfires, followed by the hard commodities sector, permanent agriculture and shifting cultivation.⁶⁰

The Amazon in Guyana's NDC

The NDC does not explicitly mention the Amazon within any of its policies or measures, but it does mention that Guyana's Kaieteur National Park was the first protected area in the Amazon region.

Forests in Guyana's NDC

Guyana's NDC does not include any emissions reduction targets, nor does it include any forest-relevant targets. It does, however, include several forest-relevant policy issues. For example, it includes a measure to conserve an additional 2 million hectares through the National Protected Area System and other effective area-based conservation measures and mentions that mangrove forests are counted within this target. The NDC also includes measures related to sustainable forest management (continue and improve ongoing work to realize sustainable forest management), forest governance (forest monitoring will maintain a high level of timber legality, with the aim to maintain the rate of illegal logging at less than 2% of production), and REDD+ (to contribute to avoided deforestation and achieve an effective REDD+ programme, Guyana will implement policies measures, and incentive programmes, to engender broader participation of civil society and the private sector in actions to avoid deforestation and forest degradation).

The NDC mentions that the country has developed a comprehensive and robust forest MRV system through its REDD+ program, and that it will be able to complete and maintain this system contingent on the availability of sufficient financial resources. The NDC does not include gender considerations but does mention that the country will strengthen its support for IPs and LCs through offering them the option to participate in and benefit from the national REDD+ program. The NDC mentions Guyana's biodiversity and the country's commitment under the CBD but does not mention synergies with any other international frameworks (e.g., GGA, SDGs, NAP, or UNCCD).

Guyana's NDC would benefit from emissions reduction targets (forest-related or otherwise), as well as quantitative targets for key forest issues such as deforestation, forest degradation and sustainable forest management. The NDC could also outline synergies with international frameworks beyond the CBD to demonstrate the country's commitment to addressing key issues around forests and sustainable development more broadly.





Forests in Suriname's NDC

Suriname's NDC does not include any emissions reduction targets, but it includes one quantitative forest target: to maintain its 93% forest cover and its historic annual rate of deforestation below 0.1%. The NDC includes a few forest-related policy issues, such as for protected areas (Suriname has established 14% of its total land area under a national protection system and will continue to pursue the expansion of this system by increasing the percentage of forests and wetlands under protection to at least 17% of the terrestrial area by 2030), mangrove management (mangrove forests that protect the Atlantic coastline will be protected within a scheme coupled with improved land zoning and enforcement capacities), and REDD+ (Suriname is implementing a major REDD+ strategy).

Suriname's NDC does not include explicit mention of how progress on forest targets and measures will be monitored, reported, or evaluated. It does not include gender considerations, although it does consider IPs and LCs and notes the importance of their role in the sustainable management and maintenance of the integrity of the country's forests. The NDC mentions the importance of biodiversity conservation and mentions country's National Biodiversity Action Plan as well as its NAP. The NDC is aligned with the SDGs but not the GGA nor the UNCCD.

Overall, Suriname's NDC would benefit from additional forest targets and policies to address the country's drivers of forest loss. Further, considering the disproportionate level of forest loss that occurs in the country's Amazon region (Sipaliwini), the NDC could more clearly outline an approach for addressing drivers of forest loss in the Amazon. Additionally, considering the country's commitment to implementing its national REDD+ strategy and to maintaining high forest cover and a low annual deforestation rate, it would benefit from articulating specific mechanisms/systems within its NDC for monitoring, reporting, and evaluating progress on its forest targets and policies.



Suriname (NDC 2.0)



Role of forest in climate and biodiversity action in Suriname

Suriname has a total land area of approximately 15.6 million hectares⁶¹, with approximately 15.19 million hectares covered by forests.⁶² The vast majority of Suriname's tree cover is found in the Sipaliwini region, which forms part of the greater Amazon rainforest.⁶³ In 2024, Suriname lost 34,900 hectares of natural forest, equivalent to 20.4 Mt of CO₂ emissions.⁶⁴ The single largest driver of tree cover loss in the country from 2001 to 2024 was the hard commodities sector. followed by permanent agriculture, logging, shifting cultivation and wildfires.65

ANNEX 2. NDC ASSESSMENT CRITERIA

Do NDCs set quantitative targets related to forests?

- Economy-wide emissions mitigation targets
- Sectoral emission mitigation targets related to forests (e.g., AFOLU / FOLU / LULUCF)
- Deforestation targets
- Forest degradation targets
- Restoration targets
- Primary forests targets
- Sustainable Forest Management (SFM) targets
- Key Biodiversity Area (KBA) targets
- Paragraphs 33 and 34 of the GST

Do NDCs integrate key policy measures related to forests?

- Protected areas
- Sustainable Forest Management (SFM)
- Payment for ecosystem services
- Forest governance
- Community forest management
- Agroforestry
- Mangrove management
- Deforestation and Conversion Free (DCF) supply chains
- REDD+
- Amazon forest-related target or measures

Do NDCs consider forests within their MRV section?

Do NDCs include considerations for marginalised groups?

- Gender and women
- Indigenous Peoples (IPs) and local communities
- Do NDCs include any other IPs and LCs related measures in their NDCs?

Do NDCs cross-reference other global goals and frameworks?

- Any mention of biodiversity
- Convention on Biological Diversity (CBD);
 Global Biodiversity Framework (GBF); National Biodiversity Strategies and Action Plans (NBSAPs)
- Global Goal on Adaptation (GGA), UAE
 Framework Targets
- Sustainable Development Goals (SDGs)
- National Adaptation Plans (NAPs)
- United Nations Convention to Combat Desertification (UNCCD)



References

- 2022 deforestation statistics for Suriname. (n.d.). World rainforests. Retrieved October 14, 2025, from https://worldrainforests.com/deforestation/archive/Suriname.htm
- 2022 deforestation statistics for Venezuela. (n.d.). World rainforests. Retrieved October 14, 2025, from https://worldrainforests.com/deforestation/archive/Venezuela.htm
- 3. 2025 begins with 68% increase in Amazon deforestation. (n.d.). Imazon. Retrieved October 11, 2025, from https://imazon.org.br/en/imprensa/2025-begins-with-68-increase-in-amazon-deforestation/
- Amazon Cooperation Treaty Organization (OTCA). (2023). Declaration of Belem. Retrieved from https://otca.org/en/wp-content/uploads/2023/10/Declaration-of-Belem.pdf
- 5. Amazon Cooperation Treaty Organization (OTCA). (2025, August 22). Amazonian Presidents Approve the Bogotá Declaration, with Initiatives to Strengthen Forest preservation. ACTO. Retrieved from https://otca.org/en/amazonian-presidents-approve-the-bogota-declaration-with-initiatives-to-strengthen-fore st-preservation/
- Austin, K. G., Favero, A., Forsell, N., Sohngen, B. L., Wade, C. M., Ohrel, S. B., & Ragnauth, S. (2025). Targeting climate finance for global forests. Nature Communications, 16(1), 6443.
- Bello, J. (2023, May 22). Last Chance to Save The Amazon. UNEP. Retrieved September 24, 2025, from https://www.unep.org/news-and-stories/statements/last-chance-save-amazon
- **8.** Bolivia Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/-country/BOL?category=undefined
- Bolivia, Ecuador and Peru revealed as deforestation hotspots Insights Trase. (2024, November 14). trase.earth. Retrieved October 11, 2025, from https://trase.earth/insights/bolivia-ecuador-and-peru-revealed-as-deforestation-hotspots

- 10. Brazilian Ministry of Agriculture and Livestock (Mapa). (2024). Ministry of Agriculture presents Pasture Conversion Program to investors in the United States. Government of Brazil. Retrieved from https://www.gov.br/agricultura/en/news/ministry-of-agriculture-conversion-program-to-investors-in-the-united-states-of-america
- **11.** Chapter 43. Tropical South America. (n.d.). FAO. Retrieved October 28, 2025, from https://www.fao.org/4/y1997e/y1997e1c.htm.
- **12.** Chiavari, J., Motta, M., Lopes, C. L., & Corleto, A. F. (2024). Following the money: Financing bioeconomy in Brazil. Climate Policy Initiative. Retrieved from https://www.climatepolicyinitiative.org/publication/following-the-money-financing-bioeconomy-in-brazil/il/
- **13.** CIFOR. (2014). The context of deforestation and forest degradation in Bolivia. Retrieved from https://www.cifor-icraf.org/publications/pdf_files/OccPapers/OP-108.pdf
- **14.** Climate Focus. (2018). Perú JECA Report. Retrieved from https://www.andgreen.fund/wp-content/uploads/2021/12/Full-JECA-Report-Peru.pdf
- 15. Colombia Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/-country/COL?category=undefined
- **16.** Cooley, S. S., Moore, E., Martinez, J., Fahlen, J., Maybach, E., Gollerkeri, M., et al. (2025). Global "Climate Opportunity Benefit" of Forest Regeneration: Meta-Analysis Shows Warming From Soil CH4 and N2 O Is Small Relative to Agriculture. Global Biogeochemical Cycles, 39(10), e2024GB008446.
- 17. Ecuador Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/-country/ECU?category=undefined
- **18.** FAO. (2020). Global Forest Resources Assessment 2020. Retrieved from https://www.fao.org/forest-resources-assessment/past-assessments/fra-2020/en

- **19.** Finer, M. (2025, June 22). MAAP #229: Amazon Deforestation & Fire Hotspots 2024. MAAP. Retrieved October 11, 2025, from https://www.maapprogram.org/amazon-deforestation-fire-hotspots-2024/
- **20.** Finer, M. (2025, September 12). MAAP #232: The Amazon Tipping Point Importance of Flying Rivers Connecting the Amazon. MAAP. Retrieved September 24, 2025, from https://www.maa-pprogram.org/amazon-flying-rivers/
- **21.** Forest resources and context of Brazil. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/brazil/10/country-context
- **22.** Forest resources and context of Colombia. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/colombia/127/country-context
- **23.** Forest resources and context of Ecuador. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/e-cuador/42/country-context
- 24. Forest Trends. (2023). Forest-based value chains: A new bioeconomy for the Amazon Forest. Retrieved from https://www.forest-trends.org/wp-content/uploads/2023/01/Forest-based-Value- Chains-Forest-Trends-UPDATED.pdf
- **25.** Forestry in Bolivia. (n.d.). FAO. Retrieved October 11, 2025, from https://www.fao.or-g/4/x5359e/x5359e03.htm
- **26.** G20 Brasil 2024. (2024). G20 reaches consensus and establishes high-level principles on bioeconomy. G20 Brasil 2024. Retrieved from https://g20.gov.br/en/news/g20-reaches-consensus-and-establishes-high-level-principles-on-bioeconomy
- 27. Gatti, L. V., Basso, L. S., Miller, J. B., Gloor, M., Gatti Domingues, L., Cassol, H. L. G., et al. (2021). Amazonia as a carbon source linked to deforestation and climate change. Nature, 595(7867), 388–393.
- **28.** Guyana Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.globalforestwatch.org/dashboards/country/GUY?category=undefined

- **29.** Interactive Country Fiches. (n.d.). European Comission. Retrieved October 13, 2025, from https://dicf.unepgrid.ch/
- **30.** Legal Amazon definition and forest coveR. (n.d.). FAO. Retrieved October 11, 2025, from https://www.fao.org/4/j5416e/j5416e05.htm
- **31.** Los impactos devastadores de la deforestación en Colombia. (n.d.). WWF. Retrieved October 11, 2025, from https://www.wwf.org.co/?386550/deforestacion-colombia-causas-consecuencias
- 32. Marques, L. (2025, September 23). Tropical Forests Forever Facility (TFFF) proposes innovative financing model for conservation. COP30. Retrieved from https://cop30.br/en/news-about-cop30/tropical-forests-forever-facility-tfff-proposes- innovative-financing-model-for-conservation
- **33.** Minambiente. (2025). Minambiente anuncia plan urgente contra la deforestación y refuerza apoyo a autoridades ambientales. Minambiente. Retrieved from https://www.minambiente.gov.-co/minambiente-anuncia-plan-urgente-contra-la-deforestacion-y-refuerza-apoyo-a-au toridades-ambientales/
- 34. Pasternack, R. (2025, June 4). Valuing Standing Forests and Rewarding Nature Stewards in the Amazon. The Nature Conservancy. Retrieved September 24, 2025, from https://www.nature.org/en-us/what-we-do/our-insights/perspectives/value-standing-forests-rewarding-nature-st ewards-amazon/
- **35.** Peru Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.-globalforestwatch.org/dashboards/country/PER?-category=undefined
- **36.** Rights and Resources. (2018). A Global Baseline of Carbon Storage in Collective Lands. Retrieved from https://rightsandresources.org/wp-content/uploads /2018/09/A-Global-Baseline_RRI_Sept-2018.pdf
- 37. Science Panel for the Amazon. (2021). Amazon Assessment Report 2021. Retrieved from https://www.researchgate.net/profile/German-Poveda/publication/357187893_Amazon_Assessment_Report_2021/links/61ffd1ae702c892cef0aa983/Amazon-Assessment-Report-2021.pdf

- **38.** Souto, M. (2025, June 16). Latin American forests are vital to the climate crisis response. COP30. Retrieved from https://cop30.br/en/news-about-cop30/latin-american-forests-are-vital-to-the-climate-crisis-response
- **39.** Suriname Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.globalforestwatch.org/dashboards/country/SUR?category=undefined
- **40.** Taraporevala, K. (2023, August 9). What came out of the South American summit on protecting the Amazon? PBS. Retrieved from https://www.pbs.org/newshour/world/this-south-american-alliance-is-working-to-fight -deforestation-in-the-amazon
- **41.** UNFCCC. (2023). Outcome of the first global stocktake. Retrieved from https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf
- **42.** Veit, P., & Quijano, P. (2020). COVID-19, Rising Gold Prices and Illegal Mining Threaten Indigenous Lands in the Amazon. World Resources Institute. Retrieved from https://www.wri.org/insights/covid-19-rising-gold-prices-and-illegal-mining-threaten-indigenous-lands-amazon
- **43.** Venezuela Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/country/VEN?category=undefined

- **44.** World Resources Institute (WRI). (2024, April 4). RELEASE: Brazil and Colombia see dramatic reductions in forest loss, but new fronts keep tropical rates high. Retrieved May 29, 2025, from https://www.wri.org/news/release-brazil-and-colombia-see-dramatic-reductions-forest-loss-new-fronts-keep-tropical-rates
- **45.** WWF. (2021). Deforestation fronts: Drivers and responses in a changing world. Retrieved from https://wwf.panda.org/discover/our_focus/forests_practice/deforestation_fronts_/
- **46.** WWF. (2023). Amazon Briefing: For a Living Amazon. Retrieved from https://wwfint.awsassets.panda.org/downloads/amazonas-regional-brief-25102023.pdf
- **47.** WWF. (2024). Living Planet Report 2024 A System in Peril. Retrieved from https://wwfl-pr.awsassets.panda.org/downloads/2024-living-planet-report-a-system-in-peril.pdf



- Bello, J. (2023). Last Chance to Save The Amazon. UNEP. Retrieved September 24, 2025, from https://www.unep.org/news-and-stories/statements/last-chance-save-amazon.
- WWF (2018). Inside the Amazon. Retrieved from https://wwf.panda.org/discover/knowledge_hub/where_we_work/amazon/about_the_amazon/
- WWF. (2024). Living Planet Report 2024 A System in Peril. Retrieved from https://wwflpr.awsassets.panda.org/downloads/2024-living-planet-report-a-system-in-peril.pdf.
- Our World in Data (2025). Greenhouse Gas Emissions. At https://ourworldindata.org/greenhouse-gas-emissions
- 5. WWF. (2024).
- Science Panel for the Amazon. (2021). Amazon Assessment Report 2021. Retrieved from https://www.researchgate.net/profile/German-Poveda/publication/357187893_Amazon_Assessment_Report_2021./links/61ffd1ae702c892-cef0aa983/Amazon-Assessment-Report-2021.pdf.
- 7. Science Panel for the Amazon. (2021).
- 8. WWF. (2024).
- Pasternack, R. (2025). Valuing Standing Forests and Rewarding Nature Stewards in the Amazon. The Nature Conservancy. Retrieved September 24, 2025, from https://www.nature.org/en-us/what-we-do/our-insights/perspectives/value-standing-forests-rewarding-nature-stewards-amazon/.
- 10. Bello, J. (2023).
- Gatti, L. V., Basso, L. S., Miller, J. B., Gloor, M., Gatti Domingues, L., Cassol, H. L. G., et al. (2021). Amazonia as a carbon source linked to deforestation and climate change. Nature, 595(7867), 388–393.
- Finer, M. (2025, September 12). MAAP #232: The Amazon Tipping Point Importance of Flying Rivers Connecting the Amazon. MAAP. Retrieved Septem ber 24, 2025, from https://www.maapprogram.org/amazon-flying-rivers/.
- 13. WWF. (2024).
- 14. Bottino, M.J., Nobre, P., Giarolla, E. et al. (2024). Amazon savannization and climate change are projected to increase dry season length and temperature extremes over Brazil. Sci Rep 14, 5131; Flores, B.M., Montoya, E., Sakschewski, B. et al. (2024). Critical transitions in the Amazon forest system. Nature 626, 555–564; Pires, G. F., & Costa, M. H. (2013). Deforestation causes different subregional effects on the Amazon bioclimatic equilibrium. Geophysical Research Letters, 40(14), 3618–3623.
- Finer, M. (2025, June 22). MAAP #229: Amazon Deforestation & Fire Hotspots 2024. MAAP. Retrieved October 11, 2025, from https://www.maapprogram.org/amazon-deforestation-fire-hotspots-2024/.
- 16. WRI (2023) Indigenous Forests Are Some of the Amazon's Last Carbon Sinks.
- Rights and Resources. (2018). A Global Baseline of Carbon Storage in Collective Lands. Retrieved from https://rightsandresources.org/wp-content/uploads/2018/09/A-Global-Baseline_RRI_Sept-2018.pdf.
- Souto, M. (2025, June 16). Latin American forests are vital to the climate crisis response. COP30. Retrieved from https://cop30.br/en/news-about-cop30/latin-american-forests-are-vital-to-the-climate-crisis-response.
- Marques, L. (2025, September 23). Tropical Forests Forever Facility (TFFF) proposes innovative financing model for conservation. COP30. Retrieved from https://cop30.br/en/news-about-cop30/tropical-forests-forever-facility-tfff-proposes-innovative-financing-model-for-conservation.
- 20. G20 Brasil 2024. (2024). G20 reaches consensus and establishes high-level principles on bioeconomy. G20 Brasil 2024. Retrieved from https://g20.gov.-br/en/news/g20-reaches-consensus-and-establishes-high-level-principles-on-bioeconomy.
- Forest Trends. (2023). Forest-based value chains: A new bioeconomy for the Amazon rainforest. Retrieved from https://www.forest-trends.org/wp-content/uploads/2023/01/Forest-based-Value-Chains-Forest-Trends-UPDATED.pdf.
- Chiavari, J., Motta, M., Lopes, C. L., & Corleto, A. F. (2024). Following the money: Financing bioeconomy in Brazil. Climate Policy Initiative. Retrieved from https://www.climatepolicyinitiative.org/publication/following-the-money-financing-bioeconomy-in-brazil/.
- Amazon Cooperation Treaty Organization (OTCA). (2023). Declaration of Belem. Retrieved from https://otca.org/en/wp-content/uploads/2023/10/Declaration-of-Belem.pdf.
- 24. Taraporevala, K. (2023, August 9). What came out of the South American summit on protecting the Amazon? PBS. Retrieved from https://www.pbs.org/newshour/world/this-south-american-alliance-is-working-to-fight-deforestation-in-the-amazon.
- 25. Amazon Cooperation Treaty Organization (OTCA). (2025, August 22). Amazonian Presidents Approve the Bogotá Declaration, with Initiatives to Strengthen Forest preservation. ACTO. Retrieved from https://otca.org/en/amazonian-presidents-approve-the-bogo-ta-declaration-with-initiatives-to-strengthen-forest-preservation/.
- 26. World Resources Institute (WRI). (2024, April 4). RELEASE: Brazil and Colombia see dramatic reductions in forest loss, but new fronts keep tropical rates high. Retrieved May 29, 2025, from https://www.wri.org/news/release-brazil-and-colombia-see-dramatic-reductions-forest-loss-new-fronts-keep-tropical-rates.
- 27. Minambiente. (2025). Minambiente anuncia plan urgente contra la deforestación y refuerza apoyo a autoridades ambientales. Minambiente. Retrieved from https://www.minambiente.gov.co/minambiente-anuncia-plan-urgente-contra-la-deforestacion-y-refuerza-apoyo-a-autoridades-ambientales/.
- 28. Brazilian Ministry of Agriculture and Livestock (Mapa). (2024). Ministry of Agriculture presents Pasture Conversion Program to investors in the United States. Government of Brazil. Retrieved from https://www.gov.br/agricultura/en/news/ministry-of-agriculture-presents-pasture- conversion-program-to-investors-in-the-united-states-of-america.
- WWF. (2023). Amazon Briefing: For a Living Amazon. Retrieved from https://wwfint.awsassets.panda.org/downloads/amazonas-regional-brief-25102023.pdf.

- Veit, P., & Quijano, P. (2020). COVID-19, Rising Gold Prices and Illegal Mining Threaten Indigenous Lands in the Amazon. World Resources Institute. Retrieved from https://www.wir.org/insights/covid-19-rising-gold-prices-and-illegal-mining-threaten-indigenous-lands-amazon.
- Austin, K. G., Favero, A., Forsell, N., Sohngen, B. L., Wade, C. M., Ohrel, S. B., et al. (2025). Targeting climate finance for global forests. Nature Communications, 16(1), 6443.
- Forest resources and context of Brazil. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/brazil/10/country-context.
- FAO. (2020). Global Forest Resources Assessment 2020. Retrieved from https://www.fao.org/forest-resources-assessment/past-assessments/fra-2020/en. FAO. (2020).
- 34. Legal Amazon definition and forest coveR. (n.d.). FAO. Retrieved October 11, 2025, from https://www.fao.org/4/j5416e/j5416e05.htm.
- Itaborahy, L. (2024, May 28). Cerrado loses 1.1 million hectares and surpasses Amazon deforestation. IPAM Amazônia. Retrieved October 11, 2025, from https://ipam.org.br/cerrado-loses-1-1-million-hectares-and-surpasses-amazon-deforestation/.
- 36. WWF. (2021). Deforestation fronts: Drivers and responses in a changing world. Retrieved from https://wwf.panda.org/discover/our_focus/forests_practice/deforestation fronts /.
- 37. A quick analysis of Brazil's second NDC. Technical note by Observatório do Clima. https://www.oc.eco.br/wp-content/u-ploads/2024/11/A-QUICK-ANALYSIS-OF-BRAZILS-NDC.docx.pdf.
- 38. Chapter 43. Tropical South America. (n.d.). FAO. Retrieved October 11, 2025, from https://www.fao.org/4/Y1997e/y1997e1c.htm?utm
- 39. FAO. (2020). Forestry in Bolivia. (n.d.). FAO. Retrieved October 11, 2025, from https://www.fao.org/4/x5359e/x5359e03.htm. FAO. (2020). Forestry in Bolivia. (n.d.).
- Bolivia Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/country/BOL?category=undefined.
- 41. Bolivia, Ecuador and Peru revealed as deforestation hotspots Insights Trase. (2024, November 14). trase.earth. Retrieved October 11, 2025, from https://trase.earth/insights/bolivia-ecuador-and-peru-revealed-as-deforestation-hotspots; CIFOR. (2014). The context of deforestation and forest degradation in Bolivia. Retrieved from https://www.cifor-icraf.org/publications/pdf_files/OccPapers/OP-108.pdf.
- Forest resources and context of Colombia. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/colombia/127/country-context.
- 43. FAO. (2020).
- Colombia Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/country/COL?category=undefined.
- Los impactos devastadores de la deforestación en Colombia. (n.d.). WWF. Retrieved October 11, 2025, from https://www.wwf.org.co/?386550/deforestacion-colombia-causas-consecuencias.
- 46. Forest resources and context of Ecuador. (n.d.). Timber Trade Portal. Retrieved October 13, 2025, from https://www.timbertradeportal.com/en/ecuador/42/-country-context.
- 47. FAO. (2020).
- 48. Interactive Country Fiches. (n.d.). European Comission. Retrieved October 13, 2025, from https://dicf.unepgrid.ch/.
- 49. Ministerio de Ambiente, Agua y Transición Ecológica (2024). El estado de los bosques en el Ecuador continental 1990-2022.
- Ecuador Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 13, 2025, from https://www.globalforestwatch.org/dashboards/country/ECU?category=undefined.
- 51. Venezuela Deforestation Rates & Statistics. (n.d.).
- 52. Climate Focus. (2018). Perú JECA Report. Retrieved from https://www.and-green.fund/wp-content/uploads/2021/12/Full-JECA-Report-Peru.pdf.
- 53. FAO. (2020)
- 54. Climate Focus. (2018).
- Peru Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.globalforestwatch.org/dashboards/country/PER?category=undefined.
- 56. Peru Deforestation Rates & Statistics. (n.d.).
- 57. FAO. (2020).
- Guyana Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.globalforestwatch.org/dashboards/country/GUY?cate-gory=undefined.
- 59. Guyana Deforestation Rates & Statistics. (n.d.).
- 60. Guyana Deforestation Rates & Statistics. (n.d.).
- 61. Country Profile Suriname. (n.d.). United Nations. Retrieved October 14, 2025, from https://www.un.org/esa/earthsummit/surin-cp.htm.
- 62. FAO. (2020)
- 63. 2022 deforestation statistics for Suriname. (n.d.). World Rainforests. Retrieved October 14, 2025, from https://worldrainforests.com/deforestation/archive/Suriname.htm.
- 64. Suriname Deforestation Rates & Statistics. (n.d.). GFW. Retrieved October 14, 2025, from https://www.globalforestwatch.org/dashboards/country/SUR?category=undefined.
- 65. Suriname Deforestation Rates & Statistics. (n.d.).

