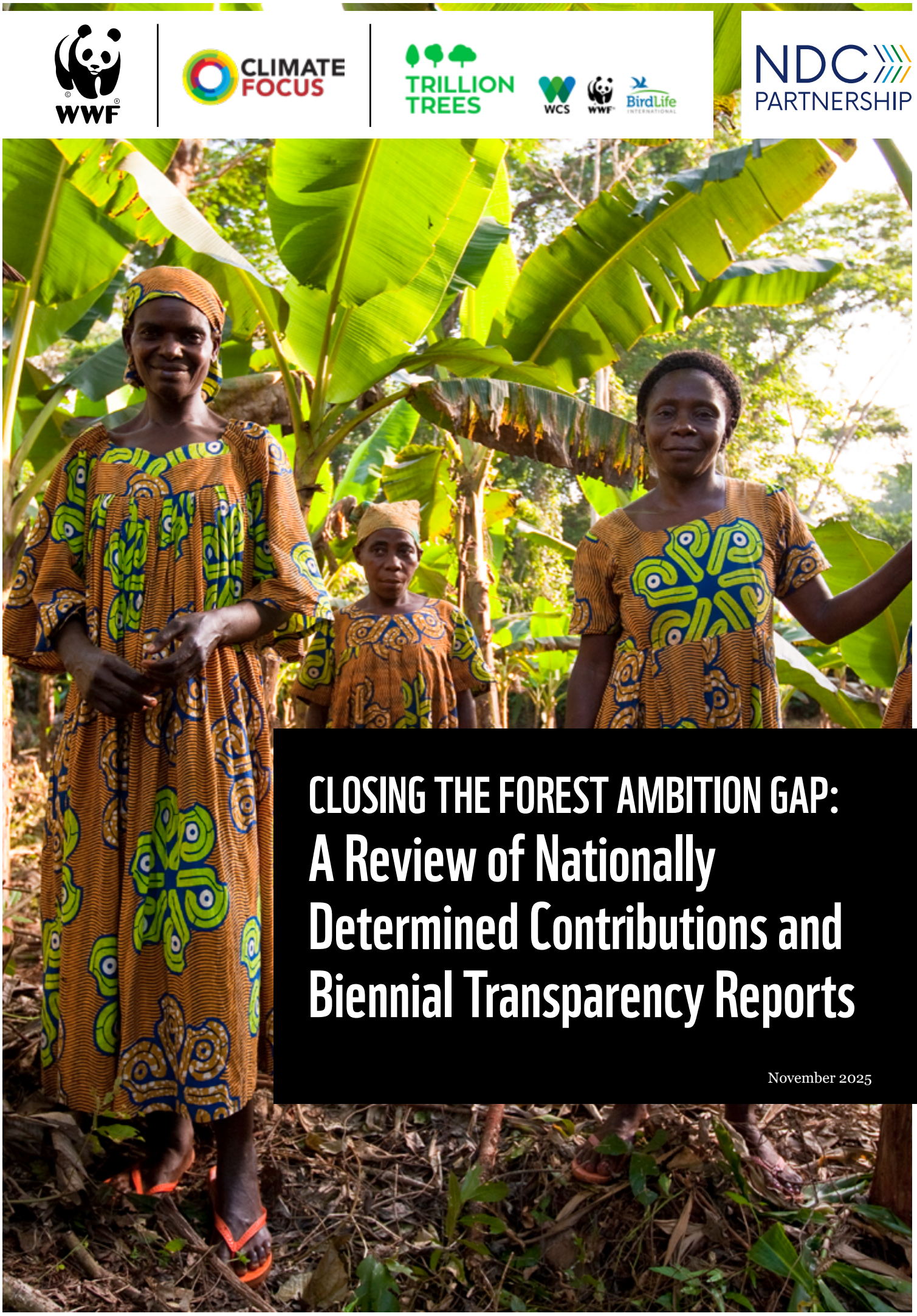

CLOSING THE FOREST AMBITION GAP:
A Review of Nationally Determined Contributions and Biennial Transparency Reports

November 2025

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Back cover photo: Portrait of Victorine Balako, president of Sala Ozwa, the Women's Association in Mbanzi, Democratic Republic of the Congo
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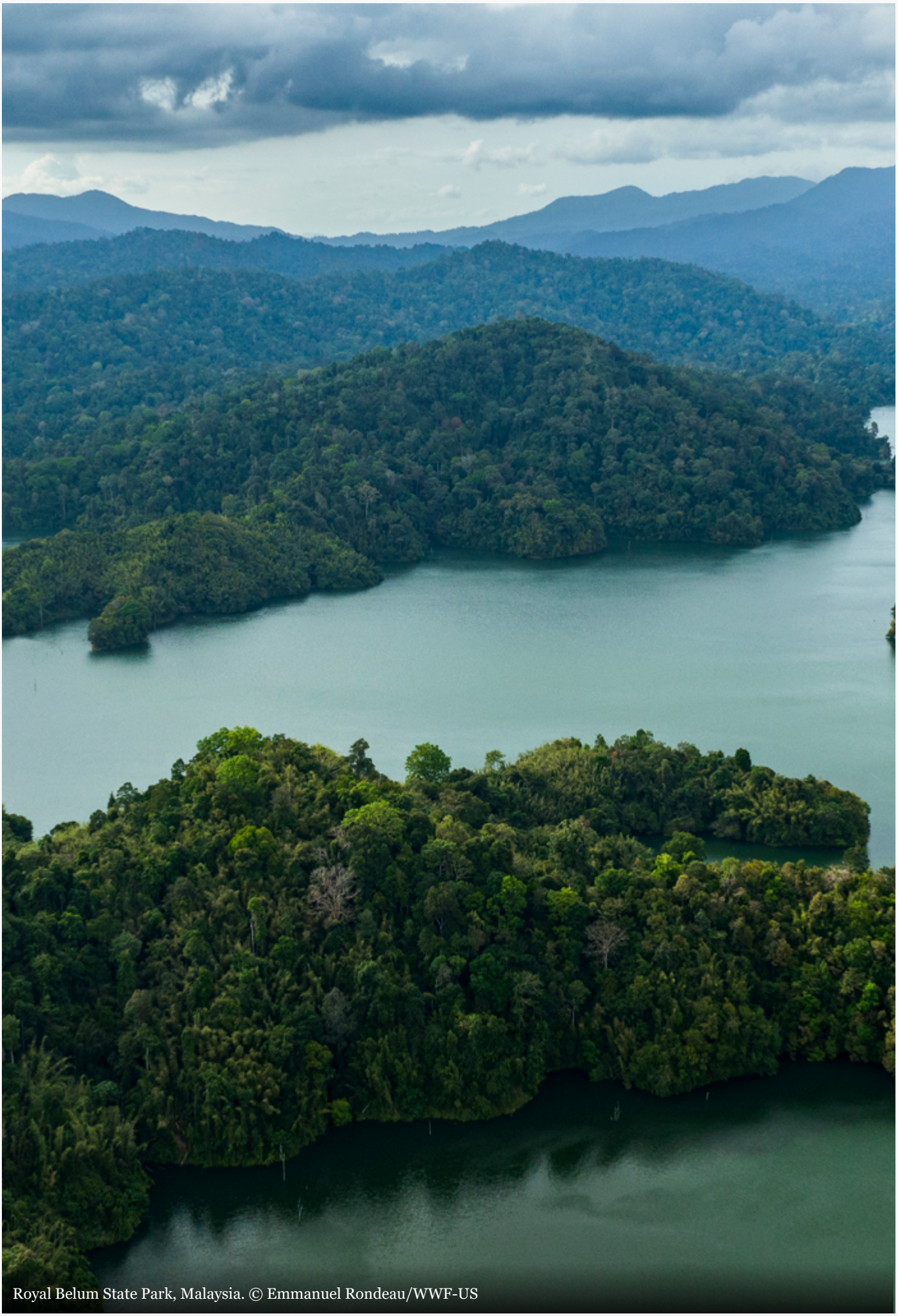
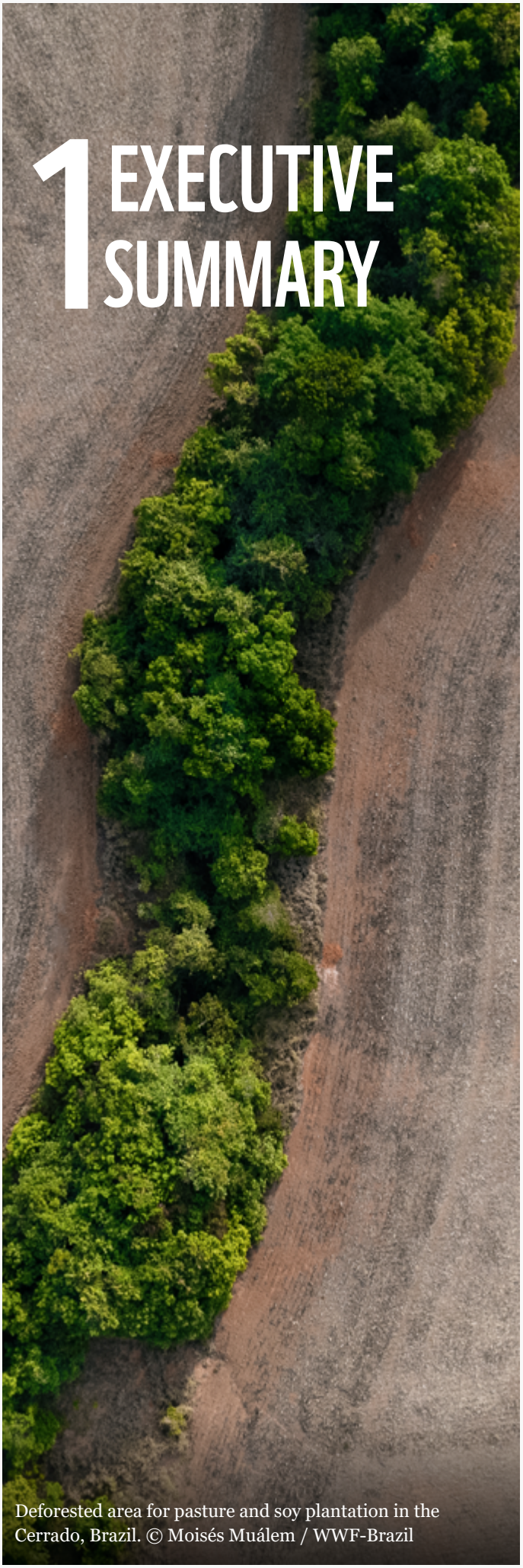
ACRONYMS

AFOLU	Agriculture, forestry and other land use
BTR	Biennial transparency reports
CBD	Convention on Biological Diversity
COP	Conference of the Parties
DCF	Deforestation and conversion-free
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FOLU	Forestry and other land use
FPIC	Free, prior and informed consent
GBF	2022 Kunming-Montreal Global Biodiversity Framework
GST	Global Stocktake
IPCC	Intergovernmental Panel on Climate Change
KBA	Key Biodiversity Area
LULUCF	Land use, land-use change and forestry
MEL	Monitoring, evaluation and learning (of climate change adaptation)
MRV	Monitoring, reporting and verification (of climate change mitigation)
NAP	National adaptation plan
NBSAP	National biodiversity strategy and action plan
NDC	Nationally determined contribution
PES	Payment for ecosystem services
REDD+	Reducing Emissions from Deforestation and Degradation plus conservation, sustainable management, and enhancement of forest stocks
SDGs	Sustainable Development Goals
SMART	Specific, measurable, achievable, relevant, and time-bound
tCO_2e	Metric tonne of carbon dioxide equivalent
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change



Royal Belum State Park, Malaysia. © Emmanuel Rondeau/WWF-US

1 EXECUTIVE SUMMARY



Deforested area for pasture and soy plantation in the Cerrado, Brazil. © Moisés Muálem / WWF-Brazil

1.1 BACKGROUND AND CONTEXT

The international community has repeatedly promised to end deforestation by 2030 to protect the world's vital forests. Forest ecosystems play a crucial role in providing services that our societies depend on, like carbon sequestration and storage, water purification, flood risk reduction, erosion control, supporting biodiversity and climate regulation, as well as tangible products like timber, fruits and medicines for those who depend on forests for their livelihoods. Yet the world continues to lose forest ecosystems, which is accelerating climate change and biodiversity loss. According to the Forest Declaration Assessment 2025, which is based on Global Forest Watch data, in 2024 alone, more than 8 million hectares of forests were lost globally.[1] Part of this loss occurred in humid tropical primary forests, where 6.7 million hectares were cleared, releasing 3.1 billion metric tonnes of greenhouse gases.[2] About 2.2 million hectares were cleared in forested Key Biodiversity Areas (KBAs), which are characterized by the presence of species that depend on forests for their survival or reproduction.[3]

There is no viable pathway to deliver on the Paris Agreement without ambitious action on forests. The urgency to end deforestation was finally embedded in the official outcome of the 28th Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP28) in 2023, or the first Global Stocktake (GST).[4] Following the first Global Stocktake under the Paris Agreement in 2023, Parties "*emphasized the importance of conserving, protecting, and restoring nature and ecosystems towards achieving the Paris Agreement temperature goal, including through enhanced efforts towards halting and reversing deforestation and forest degradation by 2030*" (paragraph 33) while "*noting the need for enhanced support and investment, including through financial resources, technology transfer and capacity-building, for efforts towards halting and reversing deforestation and forest degradation by 2030…*" (paragraph 34).

Parties to the Paris Agreement now have a mandate to explicitly embed this ambition in their national climate plans and reporting. Nationally determined contributions (NDCs) and biennial transparency reports (BTRs) are country-led documents that function as the transparency and accountability mechanisms under the Paris Agreement, linking commitments, planning, implementation and reporting by Parties toward global climate goals. NDCs are to be enhanced every five years and express national ambition and intent toward achieving the Agreement goals. BTRs are submitted every two years and demonstrate results and implementation progress toward the commitments

made in a country's latest NDC, informing the next round of enhanced commitments. Together, NDCs and BTRs present Parties' forest ambitions and progress.

In 2024, WWF and Climate Focus assessed NDCs of 130 Parties representing 156 countries (i.e., 129 countries plus the 27 Member States of the European Union, the so-called EU27) with at least 100,000 hectares of forest cover. The results showed a significant gap in ambition and planned action on forests in these NDCs. As COP30 in Brazil approaches, Parties are due to submit their new NDCs (NDC 3.0). However, as of October 2025, only 31% of Parties have submitted enhanced commitments, and 46% of Parties have submitted their first BTR reporting progress on previous NDCs (NDC 2.0).

This moment requires a 'temperature check' to see where countries stand in their ambition and progress to end and reverse global deforestation, and secure the benefits that forests provide for mitigation, adaptation and resilience as part of their climate commitments. Now is the time for renewed, stronger ambition and effective action on forests in countries' NDCs and BTRs.

1.2 THE SCOPE OF THIS ASSESSMENT

A similar analysis by WWF and Climate Focus in 2024 – *Raising the bar: Strengthening forest ambition in Nationally Determined Contributions (NDCs)* – identified 130 UNFCCC Parties representing 156 countries (129 individual countries plus the 27 Member States of the European Union) with at least 100,000 hectares forest cover.[5] The analysis focused on forest inclusion in these Parties' NDCs.

Biennial transparency reports (BTRs)

This report assesses the **79 BTRs** submitted by these Parties for progress on forest-related targets as expressed in each Party's corresponding NDC. These 79 Parties collectively account for over 74% of the world's forest cover, indicating the importance of progress by these Parties in addressing global deforestation and degradation and harnessing forests for adaptation and resilience.[6] The cut-off date for inclusion in this analysis was 28 September 2025.

Nationally determined contributions 3.0 (NDCs 3.0)

As of 28 September 2025, only **39** of the 130 Parties, collectively representing over 42% of global forest cover[6], had submitted an updated NDC 3.0, as published on the UNFCCC NDC Registry. This report assesses how these Parties incorporated forests into their NDCs 3.0 and examines changes in their level of ambition and action compared to their previous NDCs, which we assessed in 2024. This assessment and report will be updated in January 2026 to cover all NDCs 3.0 of 130 Parties submitted by 30 December 2025.

Mixed plantations of cacao and plantains under the cover of the forest, Cameroon. © WWF / Jaap van der Waarde

1.3 KEY FINDINGS

The main takeaway

Overall, findings of this analysis are mixed. While some countries show progress toward incorporating forests to fulfil the mitigation and adaptation commitments of the Paris Agreement, there are still shortcomings in forest-specific ambition and implementation.

Overlooking these priceless ecosystems comes with immense risks not only for the climate, but also for biodiversity and sustainable development. Addressing these issues in isolation undermines progress. A holistic, systems-based approach enables the most cost-effective and efficient strategies to drive the necessary changes at the pace required to meet global goals set for 2030.

BTRs

CHALLENGES AND AREAS FOR IMPROVEMENT

- Despite most countries endorsing commitments to 'end global deforestation by 2030' under the 2014 New York Declaration on Forests and the 2021 Glasgow Leaders' Declaration, only 2 of the 79 assessed BTRs include such a target, underscoring a clear gap between political pledges and action on the ground.
- While 67% of the 79 reviewed BTRs include data or analysis related to the agriculture, forestry and other land use (AFOLU), forestry and other land use (FOLU), or land use, land-use change and forestry (LULUCF) sectors, reporting on forest-specific mitigation targets and actions is far less common. Only 15% (12 BTRs) include deforestation targets and report progress, while the remaining 85% do not report on deforestation at all.
- Similarly, mitigation targets for specific actions that can support progress toward forest goals are inadequately reported, with only 43% of reviewed BTRs including restoration targets and progress, 15% reporting on deforestation and just 10% on degradation. This is not surprising given that few Parties included such targets in their previous NDCs, which form the basis for BTR reporting, but still highlights the gap between what Parties are doing and what is needed to achieve forest goals.

BRIGHT SPOTS AND POSITIVE TRENDS

- There is generally good integration and reporting on forest-based adaptation, with 62% of BTRs reporting progress on this in their adaptation sections. In contrast only 15% report on forest-based mitigation.
- Among BTRs reporting on adaptation targets and actions, more than half report some progress on these targets. Among those reporting on their sectoral land-use targets, more than three-quarters (77%) report some progress in achieving them.
- References to Indigenous Peoples, local communities and marginalized groups are relatively widespread with 68% of BTRs including them, indicating growing recognition of social dimensions in forest and land governance.
- Biodiversity is acknowledged in just over half of BTRs, with 90% of these making references to biodiversity in relation to forests.

NDCs 3.0

CHALLENGES AND AREAS FOR IMPROVEMENT

- Forest ambition remains critically low among NDCs 3.0 and is not aligned with the first GST outcome decision mandate on deforestation. Only one NDC explicitly commits to achieving zero deforestation by 2030, and only four NDCs reference paragraph 33 on 'halting and reversing deforestation and forest degradation by 2030' from the first GST outcome decision. Given that these 39 Parties account for 42% of global forest cover[6], their level of ambition and action will have a major impact on the trajectory of global deforestation and associated emissions.
- Only 14 NDCs set specific forest-related emission targets, which are critical for reducing emissions from forests and other land use.
- Measurable quantitative targets for key actions are also uncommon: only 15 NDCs include targets for deforestation, 18 for degradation and 11 for sustainable forest management. Specific measures for forest governance – addressing corruption, illegal activities, land tenure and land rights – appear in only 13 NDCs, and just 18 NDCs explicitly reference forests in their monitoring, reporting and verification (MRV) plans, despite their critical role in tracking progress.
- When it comes to specific forest-related policy measures, sustainable forest management is the only widely integrated policy measure while other key measures are minimally considered. Sustainable forest management is mentioned in 25 NDCs. Fewer NDCs include other policy actions, such as agroforestry (15 NDCs), community forest management (10 NDCs), payment for ecosystem services (9 NDCs) and deforestation- and conversion-free supply chains (4 NDCs).

BRIGHT SPOTS AND POSITIVE TRENDS

- Like BTRs, NDCs 3.0 reflect broad recognition of forests' role in building resilience, with 30 of 39 NDCs 3.0 including forests in their adaptation components – slightly more than the 25 NDCs 3.0 that include at least one forest measure for mitigation.
- Restoration targets are the most prevalent, appearing in 25 NDCs with some form of quantitative goal, including 9 with adaptation-related targets. Sustainable forest management and protected areas are the most common policy measures, appearing in 25 and 15 NDCs respectively.

- Considerations for marginalized groups are relatively strong, with 37 NDCs mentioning gender and 32 referencing Indigenous Peoples and local communities, but mainly in the context of climate mitigation. Only three NDCs include gender or inclusivity elements within their forest-related adaptation measures.
- Additionally, 28 of 39 NDCs 3.0 acknowledge synergies with the SDGs, and 29 reference national adaptation plans (NAPs). Such recognition and integration across policy frameworks is essential.
- Assessed NDCs reflect broad recognition of forests' role in building resilience for ecosystems and communities, with 30 of 39 Parties integrating forests into their adaptation sections. Many extend adaptation beyond terrestrial forests to include mangroves, often as part of broader coastal and marine restoration, conservation and management efforts. Sustainable forest management is the most common management category included in adaptation sectors, appearing in 24 NDCs, followed by REDD+ (19 NDCs), restoration with quantified targets (9 NDCs) and agroforestry (9 NDCs). However, despite forest conservation and protection being among the most effective adaptation strategies, only 12 of the 30 NDCs prioritize forest conservation.
- Encouragingly, there is increased recognition of forests' role in climate action since the previous round of NDCs, with significantly more NDCs 3.0 setting targets and policy measures for forests compared to their predecessors (see summary table on following page). While the absolute level of ambition and action on forests has significant room for improvement, this upward trend signals positive momentum. These trends are largely similar to the findings in the UNFCCC 2025 NDC Synthesis Report that assessed previous and updated NDCs of 64 Parties. The Synthesis report finds that compared with their previous NDCs, more Parties included in their new NDCs forest-related climate action particularly afforestation/reforestation and sustainable forest management.

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Women and children from the Sicubir community, Angoche, Mozambique © WWF-US / James Morgan Original

	Previous NDCs	Share of assessed NDCs (39)	NDCs 3.0	Share of assessed NDCs (39)
Mitigation targets and quantitative forest targets				
AFOLU / LULUCF / FOLU mitigation target	11	28%	**14**	**36%**
Other forest mitigation target	4	10%	**13**	**33%**
End and reverse deforestation (GST paragraph 33) or similar goal	0	0%	**4**	**10%**
Deforestation	12	31%	**17**	**44%**
Degradation	6	15%	**21**	**54%**
Restoration	18	46%	**27**	**69%**
Primary forests	1	3%	**5**	**13%**
Sustainable forest management	7	18%	**12**	**31%**
Inclusion of key forest-related policy measures				
Protected areas	19	49%	**23**	**59%**
Sustainable forest management	15	38%	**30**	**77%**
Payments for ecosystem services	7	18%	**13**	**33%**
Forest governance	6	15%	**13**	**33%**
Community forest management	3	8%	**17**	**44%**
DCF supply chains	3	8%	**5**	**13%**
REDD+	15	38%	**17**	**44%**
Inclusion of women or gender consideration	32	82%	**37**	**95%**
Inclusion of Indigenous Peoples and local communities	23	59%	**32**	**82%**
Synergies with other national and global commitments				
Biodiversity	27	69%	**31**	**79%**
CBD/GBF/NBSAPs	10	26%	**22**	56%
Global Goal on Adaptation, UAE Framework Targets	Not analysed	N/A	**15**	**38%**
SDGs	27	69%	**28**	**72%**
NAPs	28	72%	**29**	**74%**
UNCCD	4	10%	**11**	28%

Forest restoration site for orangutan conservation at Bukit Piton Forest Reserve, Lahad Datu, Sabah.© WWF-Malaysia / Mazidi Abd Ghani

1.4 KEY RECOMMENDATIONS

Mobilize political and financial leadership for forests

1. **Make forests a central priority and mobilize a strong political response at COP30:** The COP30 decisions must explicitly recognize the urgent gap between forest ambition and implementation. This recognition is essential to mobilize international and national political will and resources. The decisions should either include a formal acknowledgment or call to action in the cover text or endorse the priority forest messages emerging from the Presidential Roundtable during the Leaders' Summit as a strong political signal.

2. **Scale up dedicated forest finance, most immediately into the Tropical Forest Forever Facility (TFFF)**: Ambition can only be realized if matched with adequate and predictable finance. TFFF has potential to be a powerful tool to channel increased climate finance to forest conservation, restoration and sustainable management. It is poised to become the largest finance mechanism for forests at a time when breakthroughs in forest finance are urgently needed. However, TFFF supporter countries and private and philanthropic investors must mobilize capital to ensure a successful launch at COP30. COP30 decisions must urge all financial institutions, donor countries and private investors to prioritize forest-related finance, while ensuring resources reach local communities and Indigenous Peoples who are critical guardians of forests.

3. **Mobilize technical support for forests in climate action:** The integration of nature-based solutions and/or ecosystem-based approaches, particularly concerning forests, into NDCs must become a core political priority supported by sustained technical assistance. Similar to the "Blue NDC Challenge", a "Forest NDC Challenge" could be launched – a global commitment by coalitions of the willing to halt and reverse deforestation through a scaled-up inclusion of forest-based mitigation and adaptation measures in NDCs and implementation plans. This initiative would create political momentum at national level up to and beyond 2030 and offer technical and financial support to implement strong forest-climate actions. Key institutional organizations and platforms such as the Forest and Climate Leaders Partnership and the NDC Partnership could be instrumental to advance on this work, both technically and politically, and further expertise could be leveraged through scientific and civil society networks.

Build the foundations for forest action in NDCs

4. **Align NDC ambition with global forest commitments**: Parties must enhance NDC ambition by fully aligning with the commitment to halt and reverse deforestation by 2030, as expressed in the outcomes of the first GST and the Glasgow Leaders' Declaration on Forests and Land Use. Replace general and vague commitments with clear, measurable zero-deforestation targets supported by defined timelines to ensure accountability and progress.

5. **Design SMART targets**: Parties must conduct regular assessments of direct drivers of deforestation, including the role of agricultural production and supply chains, extractive industries, infrastructure and wildfires, as well as underlying factors like international trade, debt, finance and subsidies. This will enable them to revise existing targets and policy actions and develop new ones, which should be done through multistakeholder processes to ensure a whole-of-society response. Targets should be designed using the 'SMART' framework – ensuring they are specific, measurable, achievable, relevant and time-bound. Key target areas should include deforestation, forest degradation, restoration, primary forest conservation and protection of KBAs.

6. **Mainstream forest conservation and sustainable land use across all sectors in national strategies:**

Deforestation drivers cut across multiple sectors, including agriculture, energy, infrastructure and trade. In recognition of this, Parties should adopt a whole-of-government approach that integrates forest conservation and sustainable land use into all relevant sectoral policies and investment plans. This cross-sectoral mainstreaming must be reflected concretely in NDC updates and national climate action plans as well as economic development and transition plans, ensuring coherence between forest goals and broader development agendas. Parties should report their progress in BTRs.

7. **Strengthen transparency and accountability in forest reporting:** Parties must enhance transparency and accountability in forest reporting. NDCs must clearly define baseline forest conditions consistent with REDD+ requirements for forest reference emission levels (FRELs) and forest reference levels (FRLs). They should include metrics and indicators for forest-positive actions aligned with IPCC guidelines and REDD+ MRV standards, supported by specific mitigation and adaptation actions with clear timelines and robust progress indicators. Parties must ensure that results-based actions are reported through BTRs, with technical annexes for REDD+ results, as stipulated under the Warsaw Framework.

8. **Harmonize monitoring systems for climate, biodiversity and forests:** Parties must align and integrate existing monitoring systems that enable interoperability and simultaneous reporting on climate, biodiversity and forest goals, minimizing duplication between reporting requirements across the Rio Conventions. They should develop systems that are inclusive and equitable, incorporating traditional knowledge to enhance accuracy and relevance.

9. **Facilitate inclusive and participatory forest governance:** COP30 decisions on NDC processes should emphasize the effective participation of Indigenous Peoples, local communities and forest-dependent populations in the design, implementation, and monitoring, evaluation and learning from forest-related climate actions, recognizing their rights and knowledge as fundamental to success.

10. **Prioritize and transparently finance forest-based solutions for climate and biodiversity:** Parties must allocate national resources to forest actions that advance climate mitigation, adaptation and biodiversity conservation. They must redirect public funding away from activities that drive deforestation toward forest protection and restoration, ensuring just and equitable transitions for affected communities. NDCs should clearly specify financial needs for conditional forest-related targets, with detailed budgets to enhance transparency, accountability and access to climate finance.

Rio Negro Forest Reserve, Amazonas, Brazil.
© Michel Roggo / WW

Hemiphractus scutatus Spix's horned treefrog. Manu National Park, Peru. © André Bärtschi / WWF

2. SETTING THE SCENE

The world is wading into uncharted territory as global climate change and biodiversity loss rapidly accelerate.

In 2024, global average temperatures exceeded the 1.5°C warming threshold for the first time.[7] As of September 2025, seven of the nine "planetary boundaries" – critical thresholds that keep the Earth hospitable – have been crossed.[8] Biodiversity is also in freefall: species populations have declined by 73% on average globally since 1970.[9]

A warmer world and the resulting loss of nature pose an existential threat to human life itself. When global warming alters ecosystems' functioning and reduces their ecological integrity, their capacity to provide essential services for people and communities – including providing food and fodder and regulating water supply – is also diminished. Ecosystems also provide essential climate adaptation services like buffering from climate extremes, regulating hydrological cycles, protecting soils, regulating temperature in urban areas, reducing food insecurity and providing options for economic diversification.[10]

The impacts of climate change and nature loss are well established by science, making clear the grave risks to human development as well as economic, financial and political

stability these crises pose. To mitigate and be prepared for these risks, the world must urgently take determined actions at an unprecedented scale. Nature can be our best ally in adapting to climate impacts.[11] Protecting, restoring and sustainably managing forests and their surrounding landscapes are non-negotiable actions to bring the world back inside planetary boundaries. Failing to address drivers of deforestation and reverse this loss even has the potential to transform forests from a net sink into a net source of emissions.[12]

Forest ecosystems are the heroes in the fight against climate change and biodiversity loss.

How we manage forests is directly linked to our chances of meeting Paris Agreement targets. When forests are conserved, sustainably managed and restored, they absorb an estimated net 7.6 billion metric tonnes of carbon dioxide per year – more than 1.5 times the emissions of the United States of America.[13] Forests have absorbed nearly 16 billion metric tonnes of carbon dioxide per year from 2000 to 2019,[14] and currently hold 861 billion metric tonnes of carbon within their branches, leaves, roots and soils.[15]

Forests not only sequester carbon but also help to buffer communities and ecosystems from the impacts of climate change. Forests support global hydrological cycles, regulate rainfall patterns at both local and regional scale, improve air quality, and safeguard against soil erosion and water runoff. Conserving and restoring forests and the ecosystem services they provide can therefore help to achieve the Global Goal for Adaptation established by Article 7 of the Paris Agreement and contribute to all thematic targets under the United Arab Emirates Framework for Global Climate Resilience, and particularly Target 9(d) ("Reduce climate impacts on ecosystems and biodiversity, and accelerating the use of ecosystem-based adaptation and nature-based solutions").

In addition to their climate benefits, forests are some of the most biodiversity-rich areas on the planet. Forests cover 32% of the world's land area[16] but contain most of the terrestrial species of animals, plants and insects, including over 60,000 tree species, 80% of amphibian species, 75% of birds and 68% of mammals.[17] High-integrity forests, forested KBAs, and primary and old-growth forests are unique harbours of global biodiversity.[18] Healthy forest ecosystems are essential for achieving several of the targets of the Kunming-Montreal Global Biodiversity Framework (GBF) including the flagship Target 2 and Target 3 of protecting and restoring 30% of terrestrial, inland water, and coastal and marine ecosystems worldwide by 2030, colloquially known as the 30x30 targets.[19]

Forests also fuel the global economy. They support sustainable development by providing food, medicines, materials, clean water and cultural spaces on which humans depend. Forests provide approximately 75% of the world's accessible freshwater resources, on which more than half of the global population depends for access to clean water.[20] Forest goods and services are the basis of livelihoods for hundreds of millions of people. For example, rural households in some countries and regions rely on forests and trees for up to 20% of their income.[21] A 2020 study estimated that forests generate up to US$150 trillion in economic value each year – nearly double the value of global stock markets that year.[22] The Amazon alone produces an annual economic value of US$317 billion – at least three times greater than the economic value linked to Amazonian deforestation for timber, ranching, soy or mining.[23] The ecosystem services and socioeconomic benefits from forests contribute to several global Sustainable Development Goals, including SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 6 (Clean Water and Sanitation), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action) and SDG 15 (Life on Land).

Yet we continue to lose forests, fuelling climate change.

In 2024, more than 8 million hectares of forests were permanently lost globally.[24] Much of this loss occurred primarily in the humid tropics, where 6.7 million hectares were cleared, releasing 3.1 billion metric tonnes of greenhouse gases.[25] About 2.2 million hectares of forest were cleared in KBAs, which are characterized by the presence of species that depend on forests for their survival or reproduction.[26] The Global Forest Resources Assessment (FRA 2025), based on data reported by countries for the period 1990-2025, estimates the mean annual global deforestation to be 10.9 million hectares in 2015-2025.[16] The annual rate of forest expansion was at 6.78 million in 2015–2025. [16]

Permanent agriculture and forest fires were the main drivers of forest loss in 2024.[27] While agricultural expansion has been by far the largest driver of global deforestation – causing on average 86% of the annual loss in the past decade – the impacts of forest fires have escalated dramatically in recent years and, in 2024, exceeded the emissions from agriculture in the Amazon region.[28] Emissions from the Amazon fires in 2024 are estimated at 791 million metric tonnes of carbon dioxide equivalent,[29] which is more than the total greenhouse gas emissions of Germany. Other direct drivers of forest loss include logging, mining, infrastructure development and urban expansion.[30] A range of political and socioeconomic factors influenced this trend. At the international level, these include commodity prices and market forces, and lack of international agreements or their enforcement. At national and local levels, unsound policies, unequal power relations, unclear land tenure, weak governance and lack of law enforcement, poverty, and lack of sustainable livelihood sources, investment and subsidies all contribute to deforestation.[31] Ultimately, deforestation is a systemic problem, and there is an urgent need for structural change in how production and trade are regulated, monitored and governed.

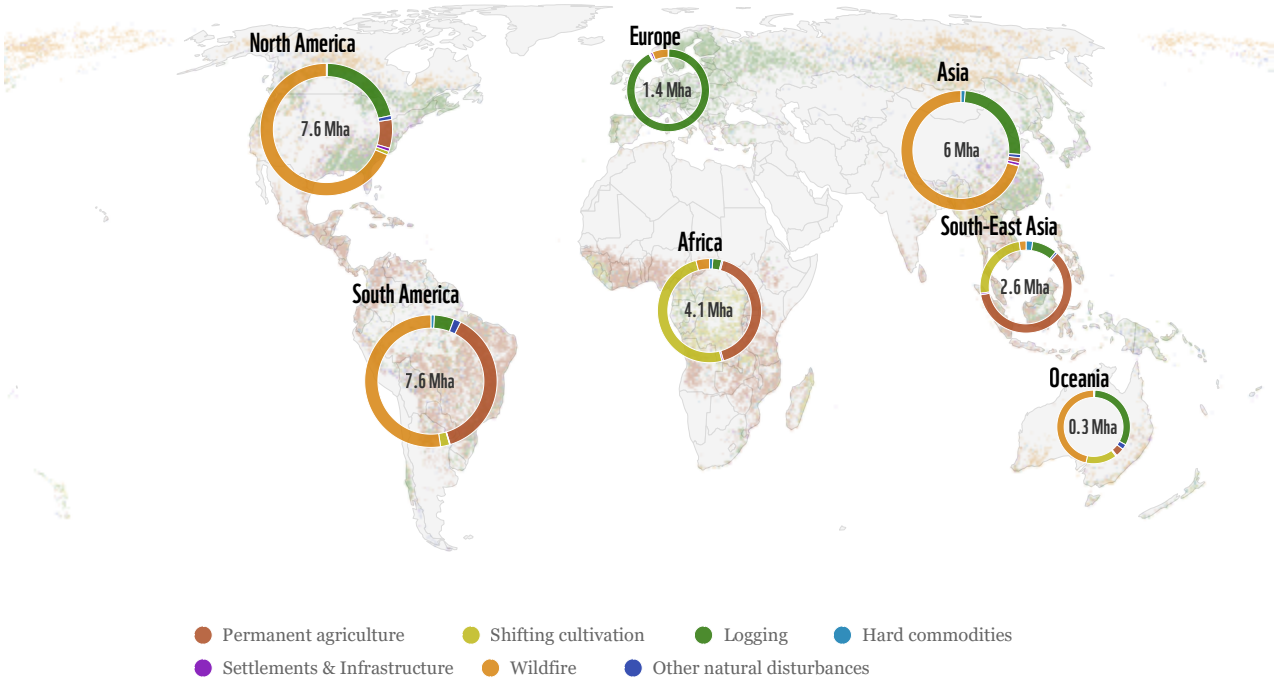


Figure 2. Tree cover loss in 2024 (Global Forest Change v1.12), disaggregated by driver following Sims et al. (2025)

Alongside deforestation, forest degradation constitutes another major threat to forest ecosystems. In 2024, 8.8 million hectares of tropical moist forests were degraded, according to the Forest Declaration Assessment 2025.[32] The degradation of tropical moist forests is estimated to release 2.1 billion metric tonnes of carbon dioxide each year, and in some countries, emissions from forest degradation exceed those from permanent deforestation.[33] A study conducted in the Amazon between 2016 and 2018 found that forest degradation was more widespread and caused up to five times more emissions than deforestation in the study's assessed area, which covered nearly 50,000 hectares.[34] Road construction, selective logging, fires and natural disturbances significantly contribute to forest degradation,[35] and these factors are often underreported in carbon emissions data.[36] Additional stressors associated with anthropogenic climate change, such as high temperatures and droughts affecting forests across all regions and latitudes, increase the risk that forests will transition from being net carbon sinks to net sources of carbon emissions at the local scale.[37, 38]

Degradation and deforestation are closely linked in a vicious cycle, where worsening forest degradation accelerates deforestation, and deforestation, in turn, exposes ever larger portions of forests to degradation drivers. Degraded forests are more likely to be cleared and permanently converted than better preserved forests, particularly in the tropics.[39] Such dynamics are projected to push the world's largest forest basins toward critical tipping points – thresholds beyond which ecosystems collapse and irreversibly transition into new states, losing the functions and services that defined their original condition.[40] The Amazon rainforest, in particular, is experiencing mounting ecological stress, with an estimated 17% to 38% of its area already degraded, and projections suggesting that degraded forest areas could expand to nearly 47% by 2050.[41] Repeated disturbances are propelling forests along critical degradation pathways, causing dense tropical forests to shift toward open-canopy ecosystems and white-sand savannahs – transformations that already affect roughly 5-6% of the southern Amazon.

The collapse of forest ecosystems would have catastrophic and far-reaching consequences to Earth's life-support systems. Human health would be severely affected worldwide,[42] as would economies across the globe. Industries dependent on timber, non-timber forest products and ecotourism would collapse, leading to mass unemployment and increased poverty.[43] Billions living within or near forests, including Indigenous Peoples,[44] would face displacement, loss of cultural identity and traditions, and, in many cases, threats to their lives. The repercussions could potentially trigger a domino effect that spurs the collapse of other ecosystems – even ones that are geographically distant and seemingly unrelated to forests.[45]

To end and reverse deforestation, countries must translate global commitments on forests into concrete ambition and action at the national level.

Following the first GST under the Paris Agreement in 2023, Parties reiterated the urgency to end deforestation and "*emphasized the importance of conserving, protecting, and restoring nature and ecosystems towards achieving the Paris Agreement temperature goal, including through enhanced efforts towards halting and reversing deforestation and forest degradation by 2030*" while "*noting the need for enhanced support and investment, including through financial resources, technology transfer and capacity-building, for efforts towards halting and reversing deforestation and forest degradation by 2030.*"

While this was the first time 'ending deforestation by 2030' was included in a COP decision, the commitment itself was far from new – countries and non-state actors have reiterated this pledge numerous times in previous declarations and initiatives. In 2014, the New York Declaration on Forests was endorsed by more than 150 governments, companies, Indigenous Peoples and civil society organizations committed to work to end deforestation by 2030. In 2021, over 140 leaders – from countries accounting for more than 90% of the world's forests – committed to halt and reverse forest loss and land degradation by 2030 under the Glasgow Leaders' Declaration at COP26. In the past three decades, the importance of forests, their protection, sustainable use and restoration has been recognized widely across frameworks, multilateral agreements (including the three Rio Conventions), and commitments from political, business and civil society leaders (see Table 1).

Table 1. Major forest-related decisions 1992-2023

Year	Initiatives
1992	Rio Conventions: United Nations Framework Convention on Climate Change (UNFCCC), Convention for Biological Diversity (CBD) and United Nations Convention to Combat Desertification (UNCCD) Rio Declaration on Environment and Development Agenda 21 Statement of Principles for the Management, Conservation, and Sustainable Development of Forests
2010	Tropical Forest Alliance
2011	Bonn Challenge Aichi Targets
2013	Warsaw Framework for REDD+
2014	New York Declaration on Forests Initiative 20x20
2015	African Forest Landscape Restoration Initiative (AFR100) United Nations 2030 Agenda and Sustainable Development Goals
2016	Paris Agreement, including the Global Goal on Adaptation
2017	United Nations Strategic Plan for Forests 2017-2030 Trillion Trees initiative
2019	UN General Assembly adopts a resolution on United Nations Decade on Ecosystem Restoration (2021-2030) Leticia Pact for the Amazon
2021	Glasgow Leaders' Declaration on Forests and Land Use Forest and Climate Leaders' Partnership Lowering Emissions by Accelerating Forest finance (LEAF) Coalition IPLC Forest Tenure Pledge
2022	Kunming-Montreal Global Biodiversity Framework under the CBD
2023	European Union Deforestation Regulation (EUDR) First Global Stocktake Belém Declaration UAE Framework for Global Climate Resilience, including targets to the Global Goal on Adaptation agreed, start of the UAE – Belém work programme on the development of indicators for measuring progress achieved towards the targets. COP28 Joint Statement on Climate, Nature and People

Burn forest next to standing forest in Brazil. © Day's Edge Productions / WWF-US

Integrating forests in climate commitments and reporting is a must for driving action and accountability on forests.

The Paris Agreement links commitments, planning, implementation and reporting of climate change mitigation and adaptation targets through a five-year cycle. First, Parties submit NDCs – which embody countries' efforts to reduce emissions and adapt to the impacts of climate change – under Article 4, and then pursue those commitments by developing policies, domestic plans and implementation strategies. Parties then report their progress in BTRs under the Enhanced Transparency Framework of the Paris Agreement. In addition to including an adaptation component within their NDC, Parties may also develop national adaptation plans (NAPs) and adaptation communications, which should ideally align with the NDC. The inclusion of adaptation components in NDCs and BTRs is voluntary but recommended to demonstrate political commitment, communicate national priorities and access climate finance. The reporting informs new and more ambitious commitments, learning and adaptive planning.[46,47] In short, NDCs express ambition and intent and BTRs demonstrate results, show how commitments are being implemented and track whether countries are on course. Table 2 offers a brief description of the most important aspects of NDCs and BTRs.

Table 2. Nationally determined contributions (NDCs) and biennial transparency reports (BTRs) in comparison

Elements	NDCs	BTRs
Who	Parties to the Paris Agreement	Parties to the Paris Agreement
What	Quantifiable mitigation target and intended mitigation and adaptation measures based on national priorities and increased ambition with each subsequent submission.	National greenhouse gas emission inventories, progress on mitigation policies and measures, climate change impacts and adaptation efforts, and levels of financial, technological and capacity-building support.
When	Every five years starting in 2020 (i.e., updated NDCs due in 2025)	Every two years starting in 2024 (first round due by 31 December 2024)
Where	Required under Paris Agreement Article 4(2); recorded in NDC Registry	Required under Enhanced Transparency Framework established by Article 13 of the Paris Agreement
Why	Translate international climate targets into national-level action by outlining countries' commitments, strategies, dedicated budget lines, implementation, monitoring and reporting	Contribute to tracking and reporting system of the Paris Agreement on countries' progress in addressing climate change and collective progress toward long-term climate targets

WHAT DOES 'GOOD' FOREST INTEGRATION IN NDCS AND BTRS LOOK LIKE?

When it comes to forests within NDCs, Parties' commitments should reflect the highest level of ambition as emphasized in the first GST. They should outline concrete actions, underlying governance mechanisms and means of implementation needed to achieve these commitments, in a transparent and accountable manner informed by science. BTRs must translate NDC forest pledges into measurable and comparable evidence of progress. The table below outlines the building blocks of what 'good' looks like for forests within NDCs and BTRs.

Table 3. Building blocks of 'good' forest NDCs and BTRs

Building blocks	NDCs	BTRs
Ambition	Ending and reversing deforestation by 2030 as emphasized in paragraph 33 of GST outcome decision	Report progress with clear milestones and indicators toward NDC ambition and target
Concrete actions for both mitigation and adaptation	Outline clear targets and activities that ensure progress toward ending and reversing deforestation by 2030, including: Addressing drivers of deforestation Addressing drivers of forest degradation Forest restoration Forest governance Protecting primary forests Community forest management Sustainable forest management Protected areas Agroforestry Mangrove management Payment for ecosystem services REDD+ Deforestation- and conversion-free supply chains	Track transparently and comprehensively the implementation of forest targets, policies and actions as set in the NDC
Governance measures and mechanisms	State clear policy measures to enable implementation, including: Governance measures to address corruption, illegal logging, illegal timber, land grabbing, land tenure, tenure rights Inclusion of Indigenous Peoples, local communities, women and other stakeholders	Track and report on the enabling policies that support the implementation of forest targets and measures as outlined in NDC and other plans
Means of implementation	Include elements of paragraph 34 of the GST outcome decision that notes "*the need for enhanced support and investment, including through financial resources, technology transfer and capacity-building, for efforts towards halting and reversing deforestation and forest degradation by 2030*" and what finance, capacity and technology is needed and/or allocated for action on forests	Track and report on investment, financial resources, technology transfer and capacity-building allocated for implementation of forest targets and measures
Transparent reporting	Clearly describe how MRV systems can support monitoring and reporting of progress on forest action	Clearly describe how monitoring, evaluation and learning (MEL) systems support forest protection, sustainable management and restoration

3. FINDINGS

This assessment analysed BTRs and NDCs to determine the extent to which Parties are integrating forest measures and targets in their climate plans and their progress in achieving them. Table 4 below summarizes the scope of this assessment.

Table 4. Summary of BTRs and NDCs assessment

Nationally determined contribution (NDC)	Biennial transparency report (BTR)
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) • Paragraphs 33 (ending and reversing deforestation) and 34 (finance, technology and capacity for implementation) of the GST • Deforestation targets • Forest degradation targets • Restoration targets • Primary forest targets • Sustainable forest management targets • Key Biodiversity Area (KBA) targets Do NDCs integrate key policy measures related to forests? • Protected areas and conservation • Sustainable forest management • Payment for ecosystem services • Forest governance • Community-based forest management • Agroforestry • Mangrove management, including conservation and restoration • Deforestation- and conversion-free (DCF) supply chains • REDD+ framework Do NDCs consider forests within their MRV, MEL or other adaptation monitoring, evaluating and learning, and/or reporting? Do NDCs include considerations for marginalized groups? • Gender and women • Indigenous Peoples and local communities Do NDCs cross-reference other global goals, frameworks and mechanisms? • Any mention of biodiversity • CBD, GBF, national biodiversity strategies and action plans (NBSAPs) • Global Goal on Adaptation, Targets of the UAE Framework for Global Climate Resilience • National adaptation plans (NAPs) • Sustainable Development Goals (SDGs) • United Nations Convention to Combat Desertification (UNCCD)	Do BTRs report progress on AFOLU / FOLU / LULUCF, and forest-based measures under ecosystem-based adaptation and/or nature-based solutions? Do BTRs report on paragraphs 33 (ending and reversing deforestation) and 34 (finance, technology and capacity for implementation) of the GST? Do BTRs report progress on specific deforestation targets? Do BTRs report progress on specific degradation targets? Do BTRs report progress on specific restoration targets? Do BTRs report progress on forest-based adaptation measures? Do BTRs include any mention of key policy measures? • REDD+ • Protected areas • Forest governance • Sustainable forest management • Agroforestry • Do BTRs include any mention of vulnerable and/or marginalized groups? • Gender and women • Indigenous Peoples and local communities Do BTRs include MRV, MEL or other adaptation reporting processes (and, if information is available, include forests within these)? Do BTRs recognize forests as crucial for biodiversity conservation?

3.1 PROGRESS ON FOREST-RELATED REPORTING IN BTRS

Though this report originally intended to review the BTRs of the 130 Parties with forest cover of at least 100,000 hectares, only **79 Parties** in this sample officially submitted a BTR by 28 September 2025 (the cut-off date for inclusion within this analysis). This section presents an assessment of these 79 BTRs.

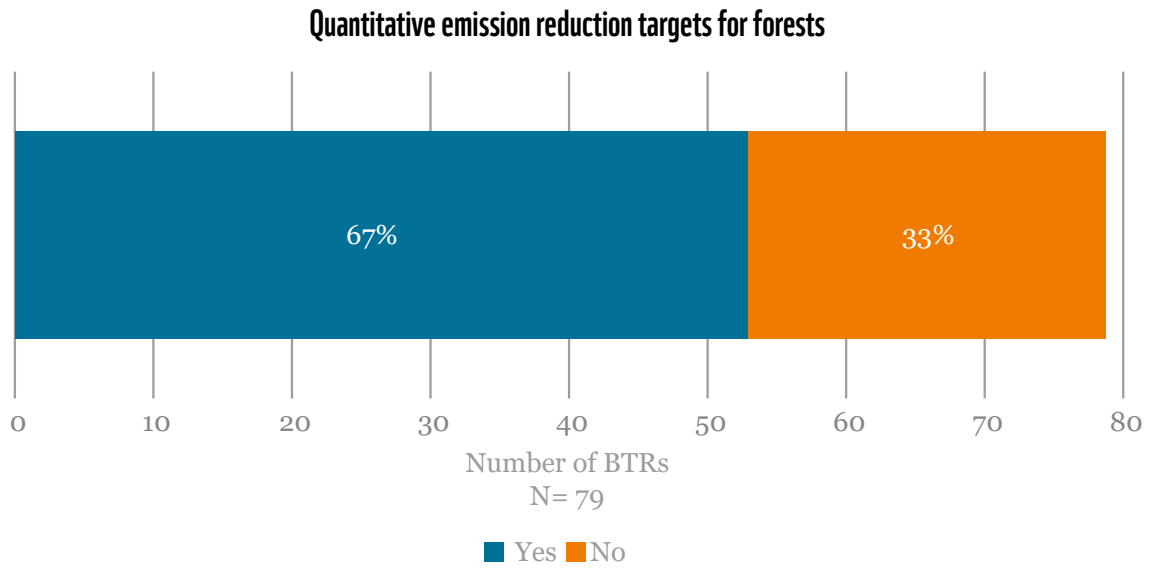
Ending and reversing deforestation by 2030

Out of 79 reviewed BTRs, no country explicitly includes any references to a commitment to 'end and reverse deforestation by 2030' as enshrined in Para 33 of the GST. Only two BTRs included a similar target (i.e., ending deforestation by 2030) despite most of them (85%) making this pledge in the Glasgow Leaders' Declaration in 2021 and all of them emphasizing it in paragraph 33 of the first GST outcome in 2023.

Progress on forest-related sectoral targets

Of the 79 BTRs reviewed, 67% (53 BTRs) include data or analysis related to the AFOLU, FOLU or LULUCF sectors (Figure 3). AFOLU, FOLU and LULUCF are important sectoral targets for forests as they describe how human activities like deforestation, agriculture and logging interact with and impact forest ecosystems, affecting their role in climate change mitigation, carbon storage and biodiversity. Sustainable management of these land uses is crucial for increasing forest health and carbon sequestration, which helps combat climate change. As emphasized by the Intergovernmental Panel on Climate Change (IPCC), the rapid deployment of these measures is essential to staying within the remaining budget for a 1.5°C target and when carefully and appropriately implemented, they can deliver substantial co-benefits and help address many of the wider challenges associated with land management.[48]

Figure 3. Quantitative emission reduction targets for forests reported in BTRs



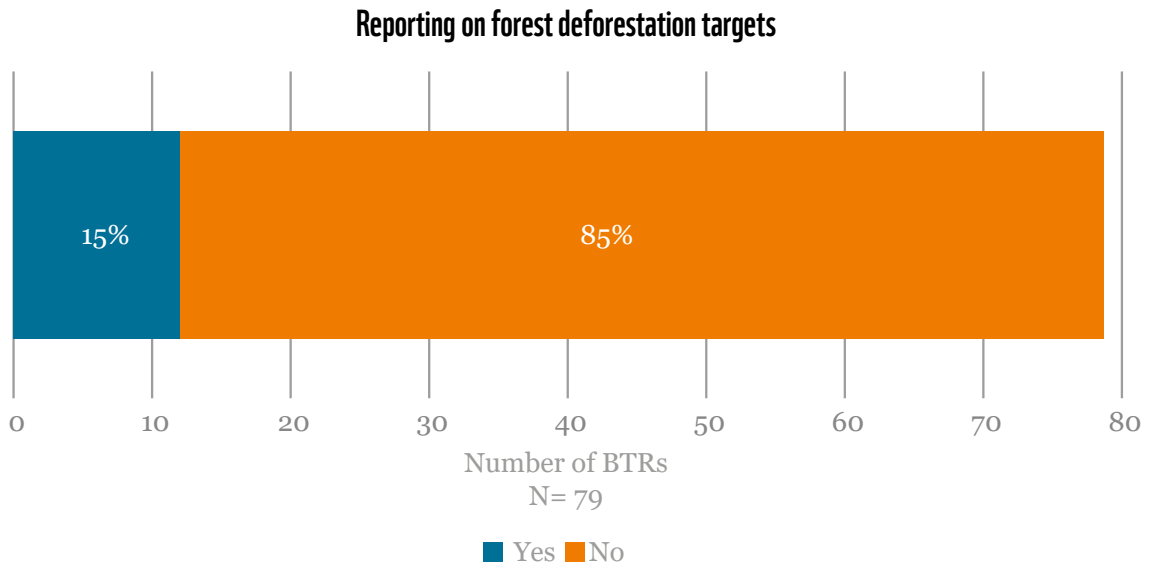
Among these, over three-quarters (41 of 53 BTRs) report progress toward their targets in these areas, while 15% (8 BTRs) indicate a decline and 4% (2 BTRs) show no progress. The remaining 2% provide insufficient information to determine the trend. Several countries provide strong examples of progress over the past 5-10 years.

Belize, for instance, reported a significant net removal of 5,063.15 kilotonnes CO_2 equivalent (approximately 5.06 $MtCO_2e$) in 2022 from the LULUCF sector, highlighting the sector's role in offsetting national emissions. **Brazil** notes a 20.4% reduction in total LULUCF emissions in 2022 compared to 2005, the baseline year in its NDC; this reduction, amounting to 522,009 kilotonnes CO_2e (or approximately 522 $MtCO_2e$), is primarily attributed to decreased deforestation. **Niger** reported that its AFOLU sector achieved 6.56% of the emission reductions expected by 2030 during the 2021 to 2024 period, signalling early progress toward its longer-term targets. **Tunisia's** LULUCF sink capacity in 2023 was 44% higher than its 2010 baseline, reflecting sustained improvements in land management and carbon sequestration.

Progress on specific deforestation targets

Out of the 79 BTRs reviewed, only 15% (12 BTRs) include deforestation targets and report progress, while the remaining 85% do not report on deforestation at all (Figure 4).

Figure 4. Reporting on deforestation targets in BTRs



Among the 12 BTRs that do include targets, only 7 (58%) indicate progress toward achieving them. For example, **Venezuela** has committed to maintaining an annual deforestation rate of 0.2%, approximately 90,000 hectares per year, by 2030, and reports having achieved 18.26% progress toward this goal. Additionally, 4 of the 12 BTRs (33%) that report deforestation targets are "unclear" regarding their implementation progress. For instance, **Costa Rica** has set a goal to maintain zero deforestation in mature forests by 2030. Although it notes that this target is "in progress", the report does not provide any measurable indicators to track achievement or progress toward the goal.

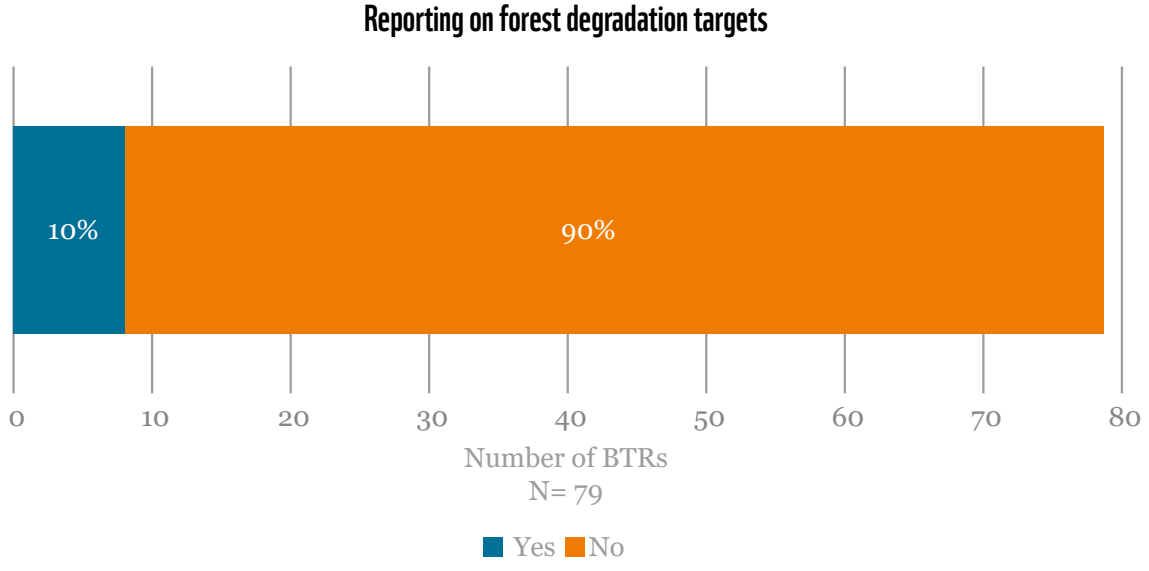
In addition to clear, measurable targets, BTRs should report on policy actions implemented to enable progress toward ending deforestation. These include policies and actions such as strengthening national conservation policies; improving forest governance – needed for effective enforcement of environmental regulations; management; strengthening Indigenous Peoples' and local communities' land rights; and aligning climate, biodiversity and development targets across sectors with forest conservation goals.

Among the 79 reviewed BTRs, there is minimal reporting on such policy measures. Those that are reported include sustainable forest management (included in 15% of all reviewed BTRs, or 8 BTRs), REDD+ strategies (11%, or 6 BTRs), policies related to protected areas (11%, or 6 BTRs), agroforestry (6%, or 3 BTRs) and forest governance policies (6%, or 3 BTRs). Countries may include several of these policies within their targets.

Progress on specific degradation targets

Out of the 79 BTRs reviewed, only 10% (8 BTRs) include degradation targets and progress, while the remainder do not report on degradation at all (Figure 5).

Figure 5. Reporting on forest degradation targets in BTRs



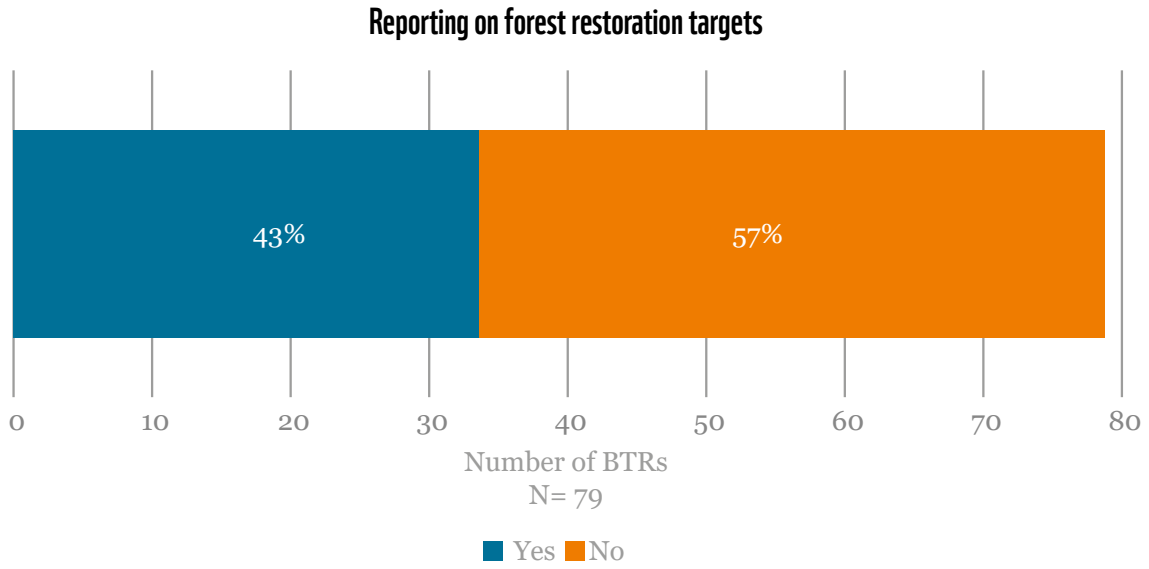
Among the eight BTRs that do include degradation targets, four indicate progress toward achieving them. For example, **Bolivia** states that by 2030, it aims to reduce the area of forest fires by 60% or 578,828 hectares per year compared to the baseline. By 2022, Bolivia reported a 22.24% reduction. **Rwanda** has adopted a strategy to reverse widespread degradation. As of 2020, the forest coverage in Rwanda has increased to 30.4% of the total area, exceeding its target of 30% forest cover by 2020. **Sri Lanka** is focused on improving the quality of growing stock in natural forests and plantations: the target was to prepare a degradation index, and in the 2021-2023 period, 85% of this work had been completed.

Two BTRs that report degradation targets do not clearly report progress. For example, **Costa Rica** reports a target of intervening to prevent degradation across one million hectares of forest. While the BTR states this measure is in progress, it provides no quantitative indication of progress.

Progress on specific restoration targets

Only 34 BTRs (43%) report on restoration targets, while the remaining 45 (57%) do not report on restoration at all. Among the 34 BTRs that report on restoration projects, three-quarters (25 BTRs) indicate some progress toward achieving them (Figure 6).

Figure 6. Reporting on forest restoration targets in BTRs



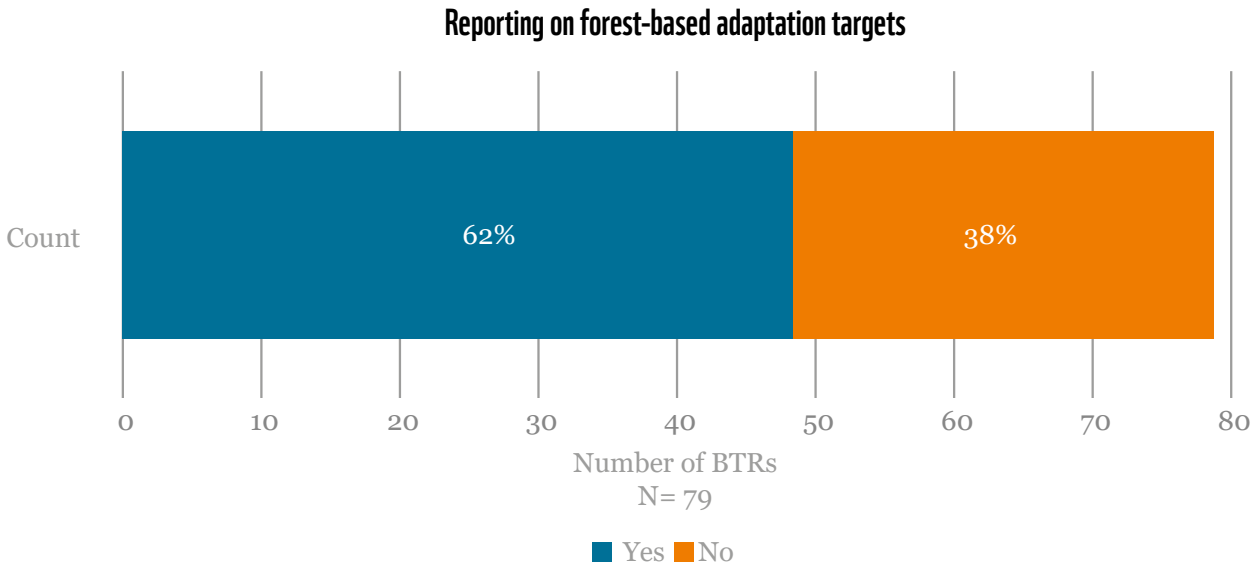
The most frequently cited restoration measures across BTRs are increasing forest cover, (included in 47%, or 16 BTRs), and afforestation and reforestation (in 29%, or 10 BTRs). For example, **Chile** aims to sustainably manage and recover 200,000 hectares of native forest by 2030, and the BTR reports 23% progress toward this goal. Additionally, Chile targets the afforestation of another 200,000 hectares by 2030, with current progress at 6.3%. **Ecuador's** BTR outlines a goal to restore 24,000 hectares by 2030 to enhance ecosystem connectivity and reduce climate change impacts, with a reported 95% progress, equivalent to 22,800 hectares restored to date. **Panama** has committed to restore 50,000 hectares of forest nationwide, expected to contribute to the sequestration of approximately 2.6 million tonnes of CO_2 equivalent by 2050. So far, 8,198 hectares have been restored, representing 16.4% progress toward the goal. However, seven BTRs (21%) include restoration targets that are unclear. For example, **Côte d'Ivoire's** BTR includes a reforestation target to increase national forest cover from 9%, or 3 million hectares, in 2020 to 20%, or 6.3 million hectares, by 2030, yet no data was reported for the 2020 to 2022 period.


Elephants navigating migration corridors. . © Jasper Doest / WWF

Progress on specific forest-based adaptation targets

Out of the 79 BTRs reviewed, 62% (49 BTRs) include forest-based adaptation targets, while the remaining 38% do not report on these targets at all (Figure 7).

Figure 7. Reporting on forest-based adaptation targets in BTRs



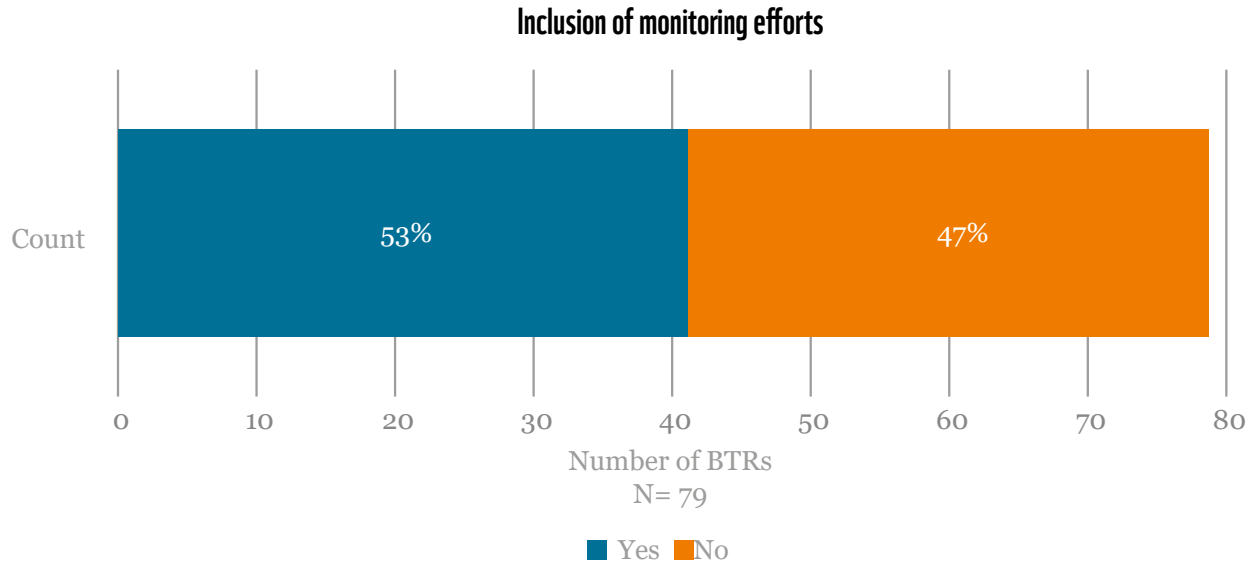
It is important to note that in several cases (17 BTRs), these measures are cross-cutting with mitigation efforts and are either repeated in both sections or explicitly referred to as cross-cutting. Among the BTRs containing such targets, just over half 51% (25 BTRs) indicate some progress toward achieving them. For example, **Peru's** BTR outlines its goal to restore ecosystems within the National System of State-Protected Natural Areas (SINANPE). To date, the report shows that 15,700 hectares have been reforested and maintained.

Among the BTRs that include forest-based adaptation targets, a variety of measures are cited. The most frequently mentioned are sustainable forest management (included in 47%, or 23 BTRs), afforestation and reforestation (included in 45%, or 22 BTRs), conservation and restoration (included in 39%, or 19 BTRs), and agroforestry (included in 20%, or 10 BTRs). Other measures referenced include pest and disease control as well as forest fire management. Some countries incorporate multiple measures within their adaptation targets.

Information about NDC monitoring efforts

About half (53%, or 42 BTRs) of reviewed BTRs include or mention MEL systems or other adaptation reporting processes within their adaptation components (Figure 8).

Figure 8. Inclusion of monitoring efforts in BTRs

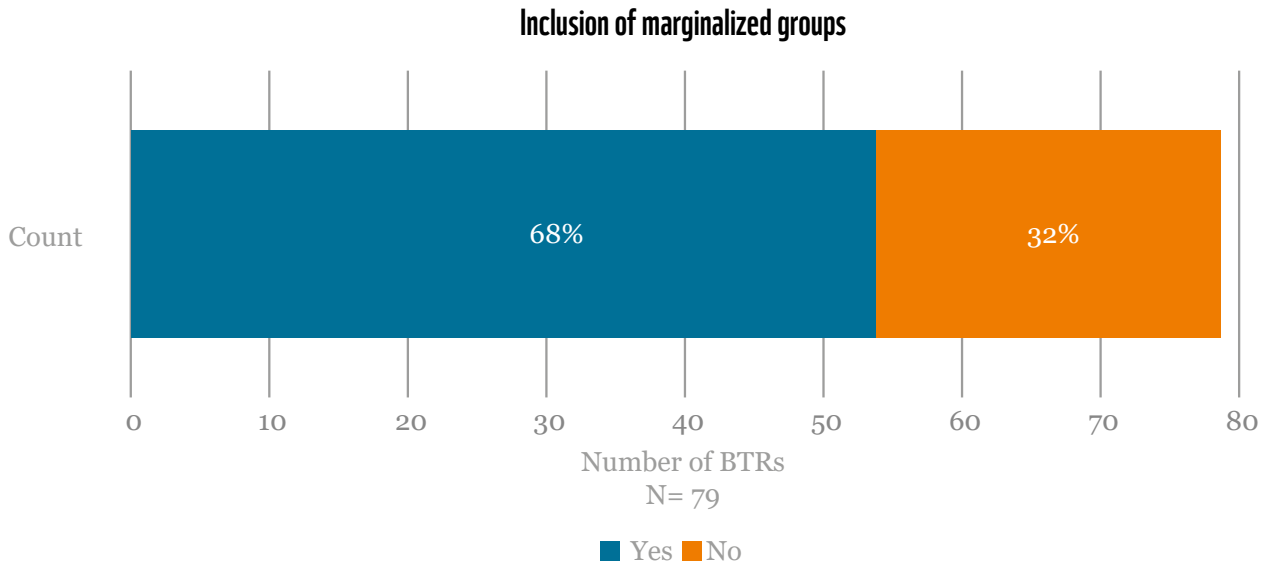


While these systems are not always specific to the forest sector, many countries are at different stages of developing and implementing MEL frameworks. For example, **Mexico** has established a comprehensive approach to monitoring and evaluation of climate change adaptation, spanning from vulnerability assessments to climate action monitoring systems at both local and national levels. Similarly, **Rwanda** has designed a monitoring framework to track the effectiveness and impact of its adaptation initiatives, embedding MEL as a core element of its national climate adaptation strategy. Although **Vanuatu** has not yet developed a formal monitoring and evaluation framework, the government is actively working to address this gap. Efforts are underway to establish a more robust system, including capacity-building through training on climate change and disaster monitoring and evaluation for government officials and agency staff.

Role of marginalized groups

Over two-thirds of reviewed BTRs (68% or 54 BTRs) include references to Indigenous Peoples, local communities and/or marginalized groups within their adaptation components (Figure 9). Indigenous Peoples and local communities play a crucial role in NDC implementation for forests by acting as stewards of forestlands, conserving biodiversity and managing significant carbon sinks. Globally, they hold or manage an estimated 54% of the world's intact forests.[49] The active involvement of Indigenous Peoples and local communities and other marginalized groups in NDC implementation is vital because progress on forest targets depends on recognizing their land rights, integrating their traditional knowledge, and providing them with direct access to finance for conservation and sustainable management efforts.

Figure 9. Inclusion of marginalized groups in BTRs



Although many are not exclusively focused on forests, mentions of marginalized groups within BTRs emphasize the vital role these groups play as stewards of ecosystems and contributors of knowledge and practices for adaptation. For example, **Vanuatu** highlights the integration of traditional ecological knowledge as a central element of nature-based solutions, including forest-related initiatives, to ensure that adaptation approaches are culturally appropriate and sustainable. Similarly, **Cambodia** outlines actions within its NAP for forestry that promote the participation of marginalized groups and women in climate change adaptation and mitigation strategies, including the creation of model 'climate smart' villages. **Paraguay** underscores the use of the best available scientific information, the inclusion of gender perspectives, and the incorporation of traditional and Indigenous knowledge in the development and implementation of adaptation policies.

Role of forests for biodiversity conservation

About half of reviewed BTRs (51%, or 40 BTRs) recognize forests as vital for biodiversity conservation, with many also emphasizing their co-benefits, including soil erosion control and the protection of water resources. Notable examples include Honduras, Panama and Venezuela, which highlight these multiple ecosystem services in their reports.

Panama reported on the design, construction and preliminary implementation actions of the Climate Change Guide for the Biodiversity Sector with a focus on adaptation and mitigation, which was developed with technical support from the Directorate of Protected Areas and Biodiversity and the Directorate of Coasts and Seas. **Venezuela** reported on the protection and restoration of biodiversity threatened by the impacts of climate change and other anthropogenic factors, to improve the capacity of ecosystems to remain resilient and functional. **Honduras** mention actions including forest management, micro-watershed management and forest protection (against fires, pests and diseases), as well as management plans for terrestrial and marine protected areas, private nature reserves, and biological corridors for biodiversity and ecosystem services.

3.2 FOREST AMBITION AND ACTION IN NDCS 3.0

Though this report originally intended to assess forest ambition and action in NDCs 3.0 of 130 Parties with at least 100,000 hectares of forests, of these, only **39 Parties** officially submitted an NDC 3.0 by 28 September 2025 (the cut-off date for inclusion for this analysis). This section presents an assessment of these 39 NDCs.

A commitment to ending and reversing deforestation by 2030

Among the 39 assessed NDCs 3.0, only four Parties reference paragraph 33 of the GST outcome in their NDCs. Only one Party – the Republic of Moldova – explicitly commits to achieving zero deforestation by 2030. Paragraph 34 is referenced even more infrequently, with only one Party (Brazil) mentioning it.

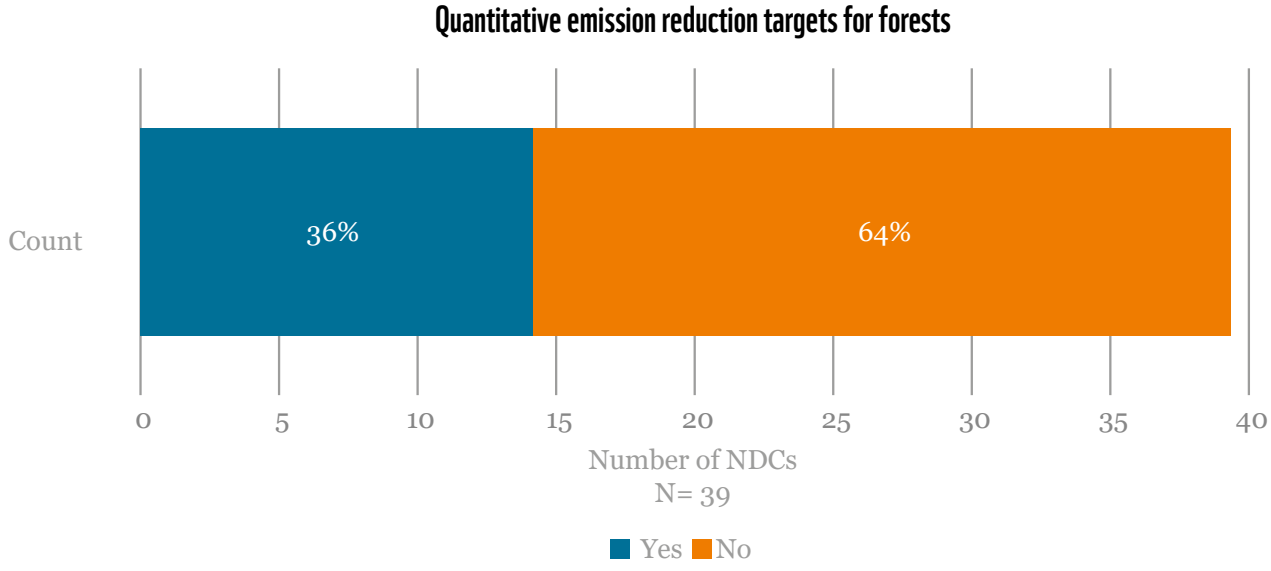
Paragraph 33 of GST outcome decision emphasizes "*the importance of conserving, protecting, and restoring nature and ecosystems towards achieving the Paris Agreement temperature goal, including through enhanced efforts towards halting and reversing deforestation and forest degradation by 2030*" while paragraph 34 notes "*the need for enhanced support and investment, including through financial resources, technology transfer and capacity-building, for efforts towards halting and reversing deforestation and forest degradation by 2030*".

Economy-wide and forest-related emissions targets in NDCs 3.0

Of the 39 Parties that have submitted NDCs 3.0, 38 include an economy-wide emissions target, but only 14 set separate specific forest-related mitigation targets, which are critical for reducing emissions from deforestation and land-use change.

While 38 of the assessed NDCs have an economy-wide mitigation target, just 14 include a quantitative separate forest-related emissions mitigation target. Furthermore, only 13 of assessed NDCs include other sectoral forest-related mitigation targets (e.g., increasing forest area). The current lack of quantitative sectoral targets suggests that Parties have a long way to go in recognizing the importance of forests for meeting their overall emissions mitigation goals (Figure 10).

Figure 10. Quantitative emission reduction targets for forests in NDCs



Parties that have set specific, time-bound mitigation targets related to forests provide informative examples. **Belize** for example sets a conditional AFOLU sector target to increase its cumulative carbon sequestration potential from 2,555 kt CO_2e (2.555 $MtCO_2e$) in 2030 to 5,110 kt CO_2e (5.11 $MtCO_2e$) in 2035 from 2020 business-as-usual levels. **Cambodia** sets FOLU mitigation targets of a 30% reduction (unconditional) and 148% reduction (conditional) as compared to a 2035 business-as-usual pathway.

CHANGES FROM THE PRECEDING NDCS

Compared to the previous NDCs of these 39 Parties, inclusion of economy-wide and quantitative forest mitigation targets has improved.

In their NDCs 3.0, 38 Parties include economy-wide mitigation targets (compared to 35 previously), and 13 Parties feature quantitative forest-related emissions mitigation targets (compared to 11 previously).

WHY IS THIS IMPORTANT?

Economy-wide mitigation targets offer overarching guidance for a Party's climate ambitions. They are most effective when they comprehensively cover all key sectors – taking a whole-of-society approach – including forests and drivers of deforestation like agriculture, infrastructure and extractive industries. By setting quantitative, forest-specific mitigation targets, governments can clarify the complementary roles and objectives of sectoral ministries, ensuring they contribute effectively to broader climate goals. Without this sectoral disaggregation, guided by sector-specific targets, there is a risk that decision-makers in siloed government departments may undermine or duplicate one another's efforts.

As of October 2025, NDCs as they currently stand have a 99.5% chance of exceeding the Paris Agreement 1.5°C target[50] and weak commitments put the world on track for 2.6°C of warming. The AFOLU sector could provide up to 30% of the emissions reductions needed to limit global warming to 2°C, at a relatively low cost,[51] while also delivering adaptation co-benefits. Many of the most impactful opportunities to mitigate1the effects of climate change within the AFOLU sector are in forests.

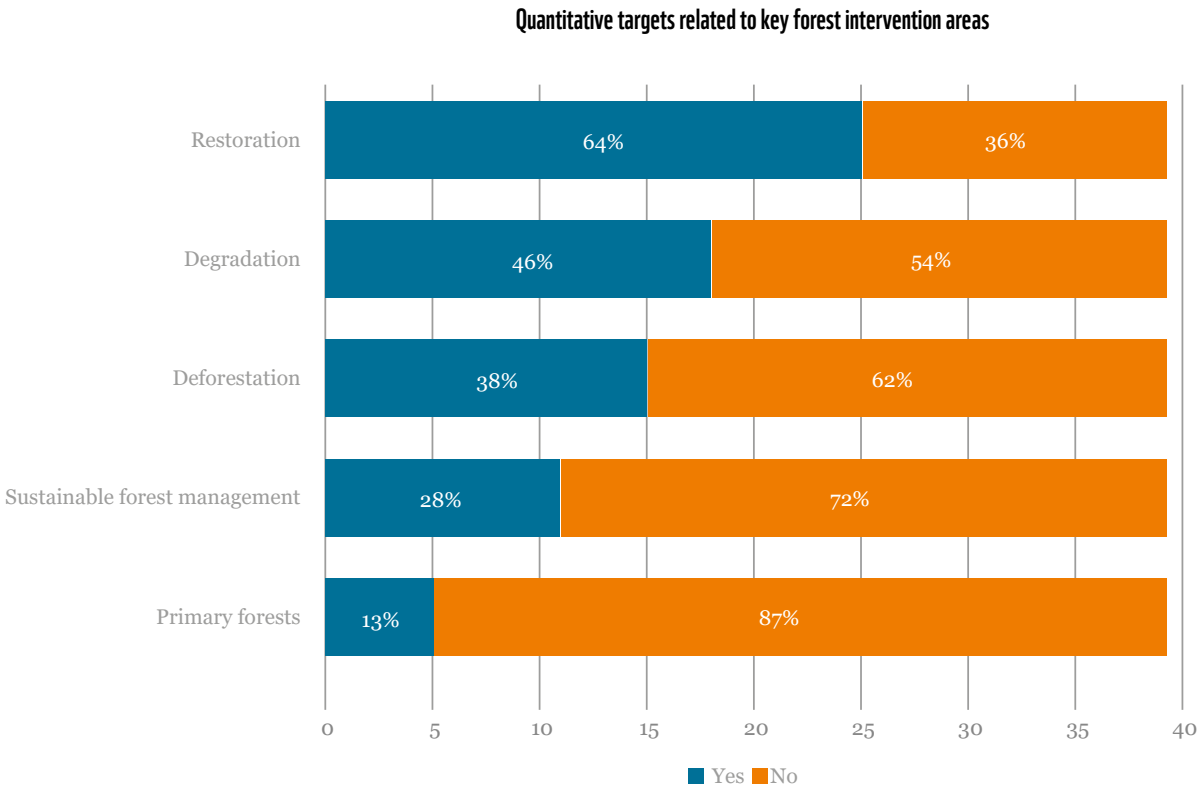
Parties need to integrate quantitative forest sector targets to achieve this potential. Progress and accountability depend on establishing specific, quantitative sectoral emissions mitigation targets and plans.

Quantitative targets for forests in NDCs 3.0

Most quantitative targets for forests are included in the mitigation sections of NDCs. Fewer outline quantitative adaptation targets for forests.

Restoration targets are the most prevalent within the mitigation section of assessed NDCs, with 25 NDCs including some form of quantitative goal. Fifteen NDCs contain measurable targets for deforestation and 18 for degradation, while sustainable forest management for mitigation benefits appears in only 11 NDCs. Just five NDCs include mitigation measures to conserve primary forests. None of the NDCs include measures to protect KBAs.

Figure 11. Quantitative mitigation targets related to key forest intervention areas



In the adaptation sections, only nine NDCs include quantitative targets for restoration, only one includes forest degradation, and two set targets on deforestation. Among the conservation and protection measures in their NDCs, Parties are not reflecting primary forests or KBAs. Their specific inclusion would benefit the effectiveness of both mitigation and adaptation action, given the extensive ecosystem services that old forests especially provide. Primary and largely intact forests and KBAs often have higher resilience and climate mitigation potential than secondary or plantation forests,[52] so retaining and restoring these forests should be prioritized.

In addition, primary forests, high integrity forests and forested KBAs are harbours of biodiversity, and their conservation is vital to achieving many GBF targets.[53] The dearth of biodiversity-related targets, however, suggests that most NDCs do not adequately align their forest-related targets and measures with NBSAPs under the CBD. Several targets emphasize tree planting or area-based restoration (Botswana's 1.2 million trees; Vanuatu's 25,000 hectares; the UAE's mangrove seedlings), but rarely link them to halting biodiversity loss, improving habitat quality or measurable ecosystem integrity outcomes. Cuba and Zimbabwe emphasize monitoring, sustainable management and livelihood-based forest pressure reduction, aligning with degradation avoidance, however, they lack numerical targets.

CHANGES FROM PRECEDING NDCS:

Compared to the previous NDCs of these 39 Parties, inclusion of quantitative forest-related targets has improved in NDCs 3.0:

- 25 Parties included restoration targets (compared to 18 previously).
- 15 Parties included deforestation targets (compared to 12 previously).
- 18 Parties included forest degradation (compared to 6 previously).
- 11 Parties included sustainable forest management (compared to 7 previously).
- 5 Parties included primary forests (compared to 1 previously).

For example, Nepal increased its commitment to maintain forest cover from 45% to 46% of the country's total area. Similarly, Uruguay introduced flexibility in its primary forest target by allowing for a potential 5% increase in native forest area, depending on resource availability. Belize established a deforestation target for protected areas, which was absent from its previous NDC.

WHY IS THIS IMPORTANT?

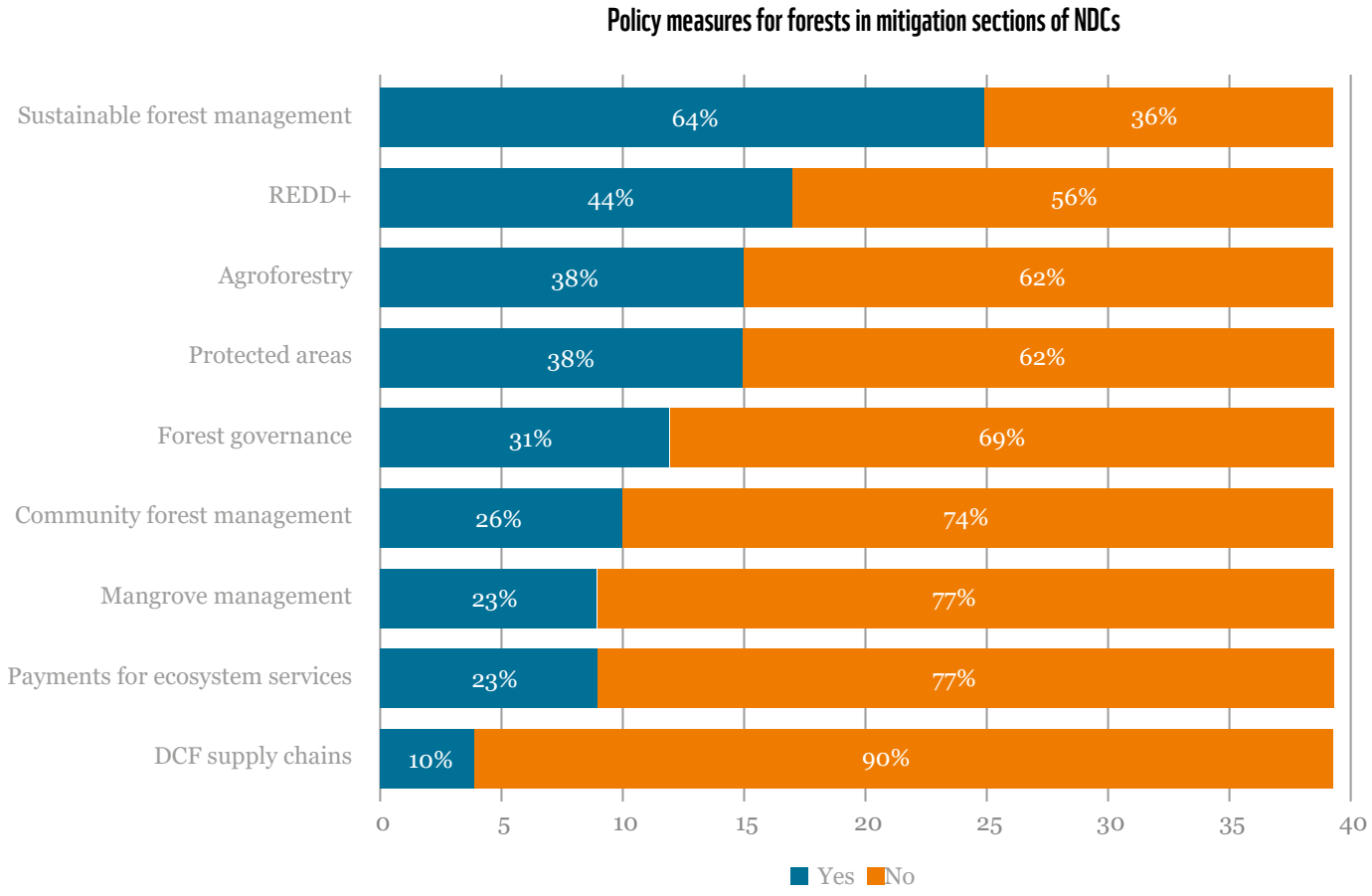
Including specific forest-related targets in NDCs is an important step to not only to signal ambition as recognized in paragraph 33 of the GST, but also to guide policy implementation on the ground.[54] Formulating forest-specific targets also enables Parties to signal what support they need and attract additional financial resources, as called for by paragraph 34.[55] Without setting specific mitigation and adaptation measures and targets, it is difficult for Parties to measure and track progress, raise funds, and adjust their strategies to increase effectiveness.

Forest-related policy measures in NDCs 3.0

Sustainable forest management and protected areas are the most common forest policy measures in the assessed NDCs. But forest governance and community forest management, critical enabling policy interventions, are not adequately included.

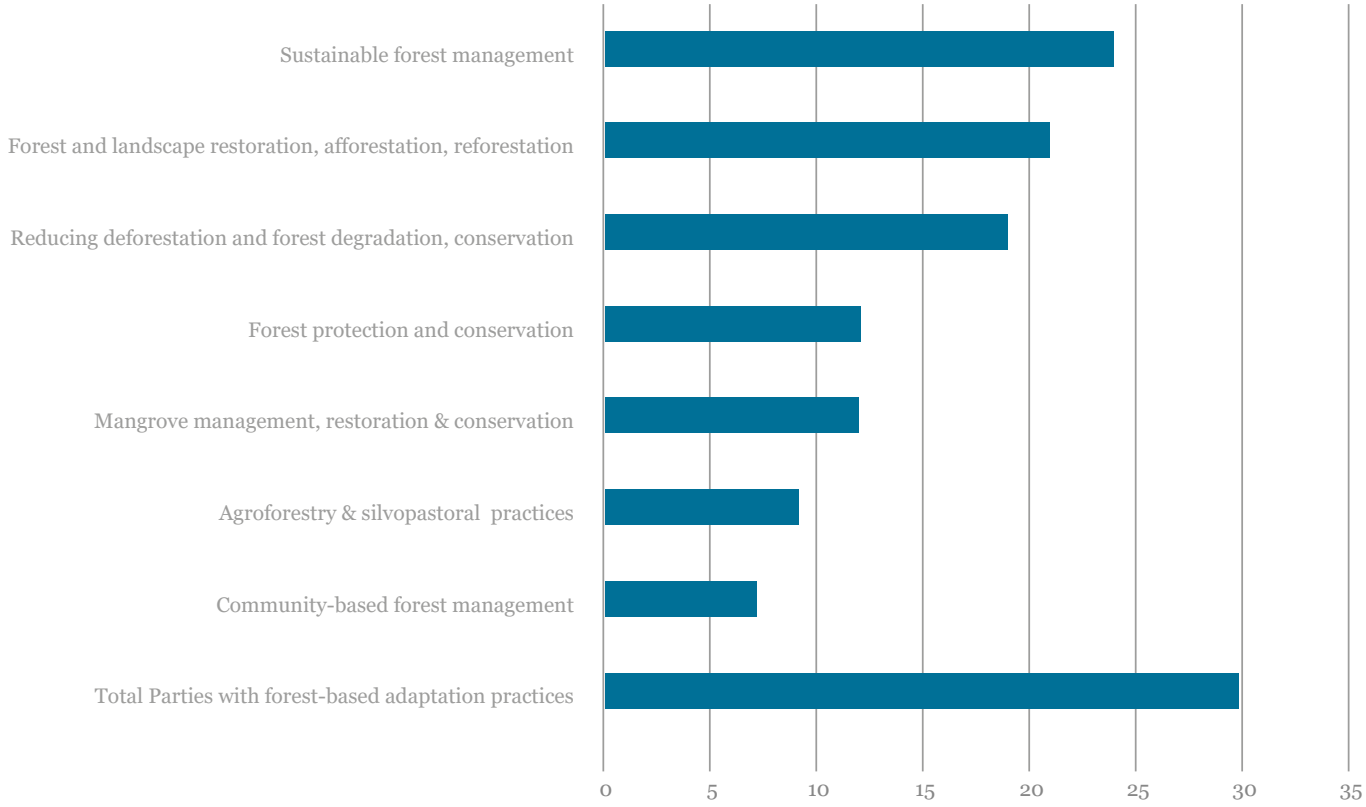
Most of these measures are included in the mitigation component of NDCs. Measures related to sustainable forest management and protected areas appear in mitigation sections of 25 and 15 NDCs, respectively (Figure 12). Agroforestry is cited in 15 NDCs, REDD+ in 17 NDCs and mangrove management is 9 NDCs. Other measures included are community forest management (10 NDCs), payment for ecosystem services in (9 NDCs) and deforestation- and conversion-free (DCF) supply chains (4 NDCs). An NDC may include the same measures in both mitigation and adaptation sections.

Figure 12. Policy measures for forests in mitigation sections of NDCs. Total NDC: 39



Assessed NDCs reflect a broad recognition of the role of forests in building resilience for ecosystems and communities, with 30 Parties integrating forests into the adaptation components of their NDCs (Figure 13). In the adaptation sections, measures related to sustainable forest management are included in 23 NDCs and community-based forest management in 7 NDCs. REDD+ is included in 15 NDCs. Only 12 NDCs include protection and conservation, while 8 reference agroforestry including silvopastoral systems for adaptation. Mangroves are mentioned by 12 small island and coastal states.

Figure 13. Forest-related measures in the adaptation sections of NDCs. Total NDCs with adaptation components: 30:



For example, **Botswana** references preventing land cover conversion during shifts in land use from forestry to ecotourism for all area under tourism activities. **Somalia** mentions reducing deforestation rates through conservation, landscape restoration, and enhanced regulation and enforcement. It also mentions the mobilization of carbon credits schemes, payment for ecosystem services and REDD+. **Vanuatu** commits to maintain and strengthen its forest protected areas, including 1,500 hectares of new forest and improving 1,500 hectares of forests with native plant species.

Counting all mention of these measures, beyond just mitigation or adaptation sections, 30 NDCs include sustainable forest management, 23 include protected areas, 19 mention agroforestry and 17 include community forest management.

CHANGES FROM THE PRECEDING NDCS

Compared to the previous NDCs of these 39 Parties, inclusion of forest-related measures and actions across both mitigation and adaptation has improved in NDC 3.0:

- 30 Parties included sustainable forest management (compared to 15 previously).
- 23 Parties featured protected areas (compared to 19 previously).
- 17 Parties included community forest management (compared to 3 previously).
- 13 Parties featured payment for ecosystem services (compared to 7 previously).
- 5 Parties mention DCF supply chains (compared to 3 previously).

For example, Vanuatu has introduced a clear target for protected areas. Botswana now specifically references sustainable forest management, and Somalia mentions both forest governance and payments for ecosystem services.

These trends are largely aligned with the findings in the UNFCCC 2025 NDC Synthesis Report that assessed previous and updated NDCs of 64 Parties.[56] The Synthesis Report finds that compared with their previous NDCs, more Parties included in their new NDCs forest-related climate action particularly afforestation/reforestation (69%) and sustainable forest management (56%), implementing REDD+ (23%), and reducing forest degradation (22%).

WHY IS THIS IMPORTANT?

Including actionable and evidence-based policy measures within NDCs can increase the likelihood that forest, climate and other interrelated targets are effectively implemented. While a wide range of policy measures contribute to protecting and restoring forests, the following policy measures analysed in this report have particularly strong evidence of efficacy.

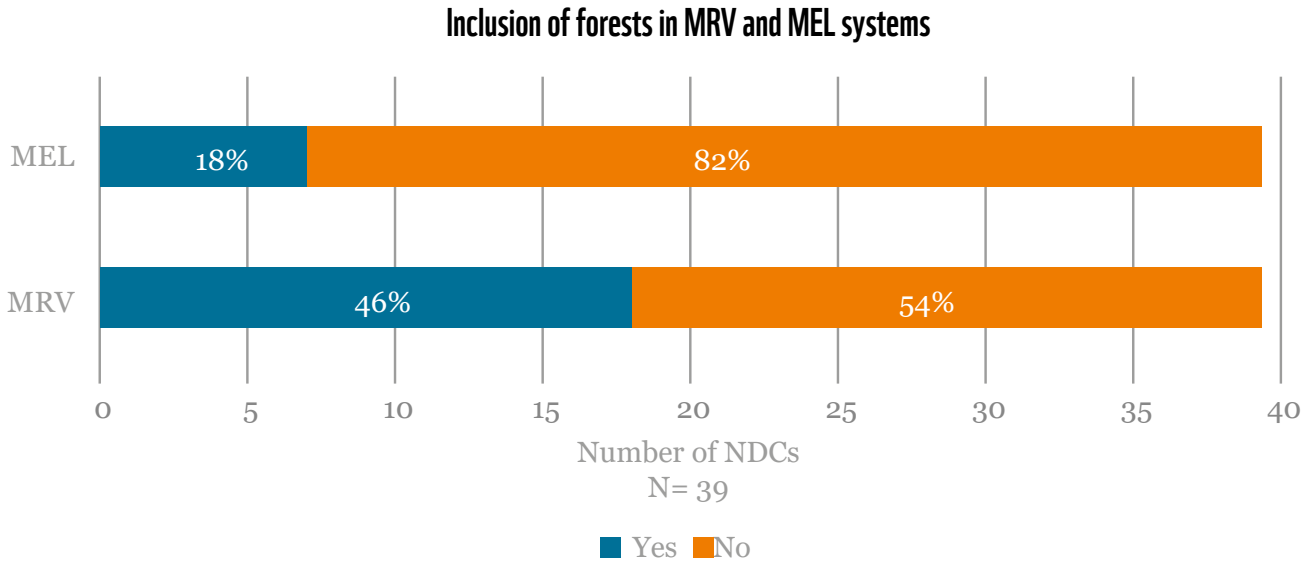
KEY FOREST-RELATED POLICY MEASURES

Policy measures	Description
Protected and conserved areas	These are included under GBF Target 3, as "areas of particular importance for biodiversity and ecosystem functions and services" that "are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories where applicable."[57]
Sustainable forest management	This refers to conserving and using forests in such a way that their resources, biodiversity, services and cultural values are available to meet both present and future needs of people and nature. Sustainable forest management can include conserving forest ecosystems, managing forests to produce goods like timber and services, changing production practices, enabling community management, and a range of other approaches.[58]
REDD+	REDD+ stands for Reducing Emissions from Deforestation and Degradation plus conservation, sustainable management and enhancement of forest stocks. By enabling forest countries to receive results-based payments in exchange for verified reductions in emissions from deforestation and forest degradation, it provides policymakers in developing countries with a framework for national climate action in the forest sector.
Community forest management	This refers to the sustainable use of forest ecosystems by local communities and Indigenous Peoples. Community forest management is often based on ancestral bonds that communities have with the ecosystems they live in and manage.[59] Forests managed by Indigenous Peoples and local communities often have higher levels of biodiversity, carbon and ecosystem integrity than other areas.
Payment for ecosystem services (PES)	A finance mechanism that places monetary value on environmental services and rewards maintenance of healthy ecosystems that continue to provide those services.[60] Ecosystem services describe the range of material and non-material benefits that people derive from ecosystems, including, for example, products that are necessary for livelihoods or subsistence, regulation of water cycles, removal of pollution from the air and soil, ecotourism activities, spiritual and cultural practices, and removal and storage of greenhouse gases.
Agroforestry	Agroforestry is a sustainable land use practice that integrates trees within agricultural production. It includes using trees on farms and in the agricultural landscape, farming in forests and along forest margins, and production of tree crops such as cocoa, coffee, or rubber. In addition to producing crops, trees contribute to agricultural production by providing fodder and shelter for livestock, or regulating micro-climates, soil quality and water quantity for crops.[61] In general, agroforestry helps maintain and enhance local ecosystems and the services they provide and contributes to conservation and sustainable use of agriculture biodiversity.[62]
Sustainable mangrove management	An umbrella concept that focuses on conserving mangrove ecosystems through a landscape approach (e.g. with measures on watersheds), preserving local ecosystem services, promoting restoration of degraded mangroves, and empowering local stakeholders to participate in processes to manage mangrove ecosystems.[63]
Deforestation- and conversion-free (DCF) supply chains	DCF practices and supply chains are systems of commodity production that do not destroy or degrade any natural ecosystems.[64] DCF supply chains maintain forests and other ecosystems and services they provide, including forests' ability to sequester and store carbon.[65] DCF policy measures can include strengthening land governance, scaling sustainable agricultural production models, increasing the consumption and trade of responsibly produced agricultural commodities, creating incentives to maintain forest integrity, enhancing data and use of data, and improving rural livelihoods, equity and inclusion.[66]

Forest commitments within monitoring and reporting systems

Only 18 NDCs explicitly reference forests in their MRV plans, despite the critical need to track forest-related emissions and progress toward climate goals. Seven NDCs reference forests in the context of MEL systems for adaptation (Figure 14).

Figure 14. Inclusion of forests in MRV and MEL systems of NDCs



There are good examples of inclusion of forests in monitoring and reporting in NDCs. For example, **Cambodia** aims to "develop and implement protected area-specific M&E frameworks to assess climate impacts on biodiversity, ecosystem services, and the livelihoods of local communities in order to inform adaptive conservation strategies and strengthen climate resilience." **Moldova's** NDC describes a "monitoring framework that includes process-level results on coordination, integration of climate change adaptation into sectoral policies (especially in the agreed priority sectors of agriculture, forestry, energy, transport, water resources and health), capacity development and knowledge management."

WHY IS THIS IMPORTANT?

The integration of forest-related considerations in MRV plans is important to measure and track progress on targets and policy measures. Without robust MRV systems, it is difficult for Parties to assess the effectiveness of forest-related mitigation and adaptation measures, making it challenging to evaluate progress, improve strategies, access finance and meet international commitments. Effective MRV ensures transparency and accountability, and helps attract climate finance by showing clear, measurable results. For example, robust forest monitoring systems will be needed to access funds from the Tropical Forest Forever Facility. Robust MRV plans increase the likelihood that targets will be quantified and implemented, enable governments to raise funds more effectively, and provide data to evaluate and change policies and strategies as needed.

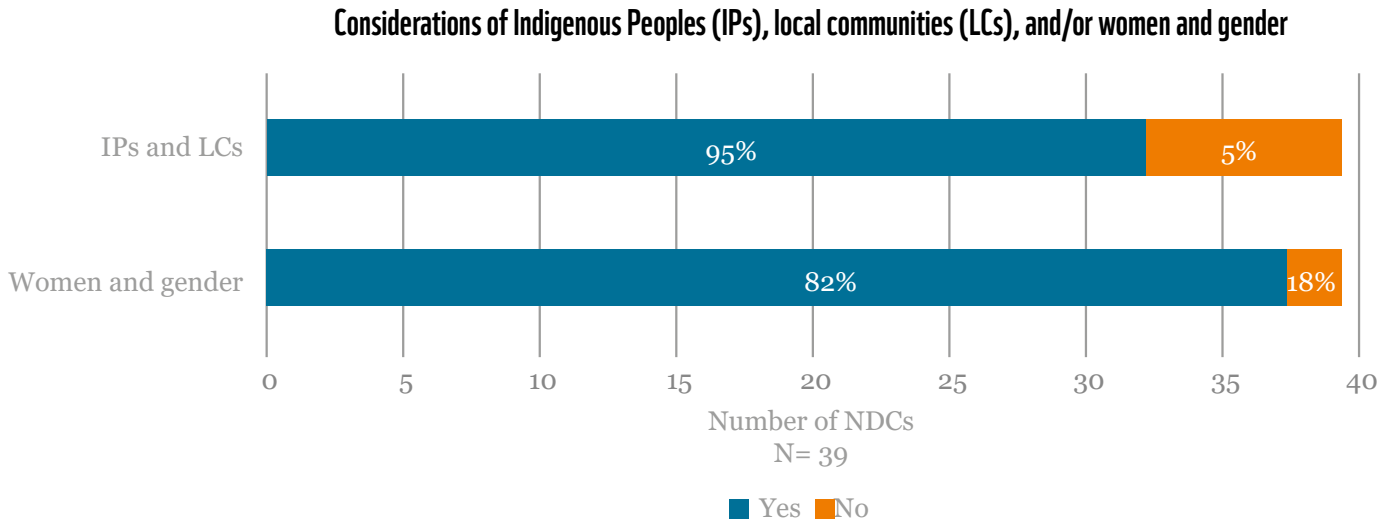
MEL plans that consider forests enable countries to monitor progress, evaluate results and foster learning around their forest policies in a structured way. This ultimately ensures that forest policies effectively achieve their intended adaptation outcomes. Measures for forest protection, restoration and sustainable management are usually implemented as ongoing processes that require learning to mitigate and adapt to climate impacts and risks. Having a MEL system is critical for forest policies to be adaptive and responsive to changes in context, such as intensifying climate impacts and risks, and new information. Both MRV and MEL systems provide countries with information that they need to report progress in their BTRs.

CONSIDERATIONS FOR FOREST STEWARDS AND MARGINALIZED GROUPS IN NDCS

Most NDCs mention Indigenous Peoples, local communities and/or gender considerations.

Of the assessed NDCs, 37 mention gender and 32 mention Indigenous Peoples and/or local communities (Figure 15). References to these groups appear throughout NDCs and may be relevant to forest goals even when not included in forest-specific targets or sections. The presence of terms related to gender, women, Indigenous Peoples or local communities does not necessarily imply that these groups were included in NDC development or implementation, that their needs are considered, nor that there is equity in policy development for these groups. Our analysis focuses solely on identifying any mention of these groups within the NDCs, without systematically assessing the ambition or depth of those references. Subsequent analyses would do well to differentiate gender-related issues from those facing Indigenous Peoples and local communities, and to examine how social safeguards, benefit sharing, and free, prior and informed consent (FPIC) are treated in NDCs.

Figure 15. Considerations of Indigenous Peoples, local communities, and women and gender in NDCs



Nepal's NDC sets a target of ensuring 50% women representation and proportional representation of Dalits and Indigenous People in key posts in community-based forest management and commits to ensuring that benefits from sustainable forest management, watershed management, and biodiversity conservation are equitably shared with local communities, women, and Indigenous People. Colombia's NDC integrates cross-cutting themes to ensure inclusive and equitable climate action following the principles of a Just Transition. The NDC development process included dedicated consultations that engaged women, youth, Indigenous Peoples, and persons with disabilities, with specific considerations for gender equality and social inclusion.

CHANGES FROM THE PRECEDING NDCS

Compared to the previous NDCs of these 39 Parties, inclusion of mentions of Indigenous Peoples, local communities, and gender and women across has improved in NDC 3.0:

- 37 Parties included gender and women (compared to 32 previously)
- 32 Parties included references to Indigenous Peoples and local communities (compared to 23 previously)

For example, Zambia and Jamaica now include references to Indigenous Peoples and local communities in their updated NDCs, while Mongolia and Botswana have introduced references to women and gender.

WHY IS THIS IMPORTANT?

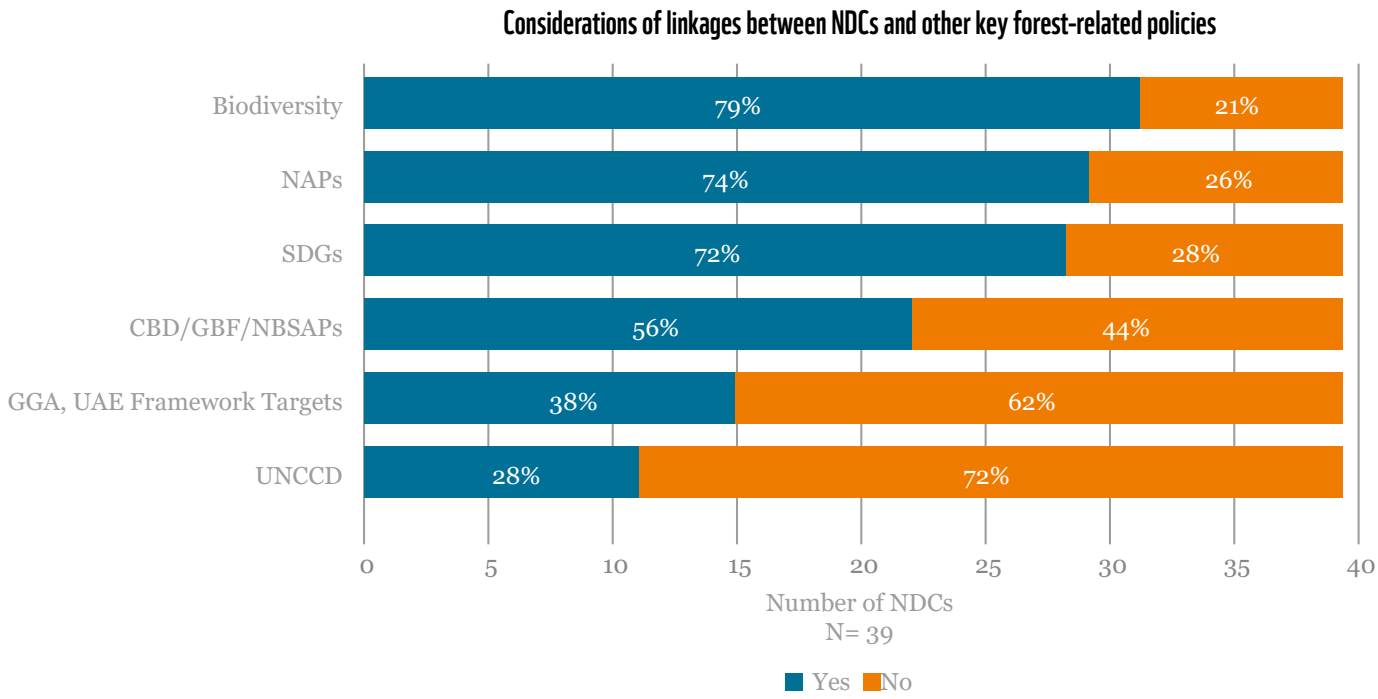
Evidence shows that climate and forest goals are far more likely to succeed when Indigenous Peoples, local communities, and women – particularly women from those groups – are consulted and given leadership in developing targets and implementation activities.[67,68] Indigenous Peoples and local communities, including women, are essential stewards, experts and stakeholders in conserving and managing forests in line with Paris Agreement goals.

References to other global goals and frameworks

Some Parties cross-reference other national strategies within their NDCs, highlighting opportunities to link climate and biodiversity goals.

Parties reference key international frameworks and national documents related to biodiversity, climate adaptation, desertification and sustainable development goals to varying degrees (Figure 16). SDGs are referenced in 28 of the assessed NDCs and NAPs in 29 NDCs, but just 11 NDCs reference the United Nations Convention to Combat Desertification (UNCCD). While 31 of the assessed NDCs mention biodiversity, only 22 explicitly mention the CBD, GBF or NBSAPs, despite the synergies highlighted in the first GST. Similarly, only 15 NDCs reference the Global Goal on Adaptation and UAE Framework Targets, despite their central role in guiding adaptation ambition, aligning national efforts and informing progress assessments under the GST.

Figure 16. Consideration of linkages between NDCs and other key forest-related policies



Good examples of references to other international commitments include the **United Kingdom's** NDC 3.0 that "recognises the importance of joining up approaches to tackling the triple planetary crises of climate change, biodiversity, and pollution, including by improving coordination between international conventions (such as the UNFCCC, the Paris Agreement, the UN Convention on Biological Diversity (CBD) and its Kunming-Montreal Global Biodiversity Framework (GBF), and the UN Convention to Combat Desertification) and through nature-based solutions and joined-up design and delivery of NDCs, National Biodiversity Strategic Action Plans (NBSAPs), National Adaptation Plans (NAPs), and other relevant strategies." **Liberia's** NDC 3.0 states it is "designed to be consistent with major international agreements. It integrates the objectives of the Rio Conventions (UNFCCC, CBD, UNCCD), aligns with the Sendai Framework for Disaster Risk Reduction, and directly contributes to achieving multiple Sustainable Development Goals (SDGs), particularly those related to poverty, hunger, gender equality, clean energy, and climate action."

CHANGES FROM THE PRECEDING NDCS

Compared to the previous NDCs of these 39 Parties, references to other global goals and frameworks have improved in NDC 3.0:

- 28 referenced the SDGs (compared to 27 previously)
- 29 mentioned NAPs (compared to 28 previously)
- 22 cited the CBD, the GBF or NBSAPs (compared to 10 previously)
- 11 referenced the UNCCCD (compared to 4 previously)


French Guiana. © Roger Leguen / WWF

4. CONCLUSION AND WAY FORWARD

This assessment of BTRs and NDCs 3.0 underscores the need to scale forest action through bolstering current national commitments and tracking their achievement. In their NDCs and BTRs, Parties embrace economy-wide emissions targets, but the majority still need to establish ambitious, specific, quantitative forest goals. While many Parties outline measures that can help address deforestation, only a small fraction of Parties reference paragraphs 33 and 34 of the first GST outcome or adopt similar targets in their NDCs. Most are yet to align national climate and forest ambition with the global goal of enhanced efforts toward halting and reversing deforestation and forest degradation by 2030. This selective ambition creates dangerous blind spots that undermine both climate objectives and global forest goals.

In selecting forest-based adaptation measures in their NDCs and BTRs, Parties should take a more holistic approach to reduce vulnerabilities and strengthen adaptive capacities and resilience. Parties can take advantage of a multitude of forest management approaches to reduce climate impacts on people and ecosystems in forested landscapes, and to sequester emissions, contributing to both climate change mitigation and resilience. NAPs often include a more systematic and detailed lists of forest policies, practices and approaches, which could be reflected in NDCs and BTRs.

Parties demonstrate varying combinations of ambition in their NDCs, strength of implementation and transparency in progress tracking. The optimal scenario combines an ambitious NDC, supported by clear policy frameworks and implementation measures, with a high-quality BTR that reports progress using robust and transparent indicators and metrics.

Ecuador. © Pablo Corral / WWF

Women going to market. Cameroon. © naturepl.com / Jabruson / WWF

5. ANNEX. METHODOLOGY

Methodology for review and analysis of BTRs

The first biennial transparency reports were systematically identified and retrieved from the official UNFCCC BTRs Repository. Only reports officially published and accessible by 31 July 2025 were included, yielding a dataset of 79 BTRs (see Table 7). The 79 BTRs include that of the European Union, which represents the combined climate plan for 27 countries of the bloc. It is important to note that not all Parties that have previously submitted NDCs had submitted BTRs by this cut-off date.

Given the length and complexity of BTRs, a structured section-based review process was applied. The information components identified in the BTRs correspond to two information areas covered in the UNFCCC's decision on *Modalities, Procedures and Guidelines for the Enhanced Transparency Framework under Article 13 of the Paris Agreement*. Two sections were prioritized across all reports, for which special attention was placed on subsections named AFOLU, FOLU and LULUCF:

- Information necessary to track progress made in implementing and achieving NDCs under Article 4 of the Paris Agreement.
- Information related to climate change impacts and adaptation under Article 7 of the Paris Agreement.

To assess the integration and progress of forest-related measures, the authors first defined a set of forest-related criteria, designed to reflect the relationship between BTRs and NDCs. These criteria encompassed targets and actions addressing deforestation, forest degradation, restoration, forest-based adaptation and related issues. Developed through an iterative process and validated by subject-matter experts, the criteria underwent careful refinement to ensure robustness and relevance. The final dimensions and questions are presented in Table 5.

A pilot review was conducted to test the clarity, applicability and consistency of the assessment framework before its full implementation. Each BTR was screened manually against the above-mentioned criteria, and findings were systematically recorded on a structured assessment template in Microsoft Excel, which was subsequently used for comparative and in-depth analysis.

Table 5. BTR review criteria

Review dimension	Review questions
Sectoral targets	Does it include progress on AFOLU / FOLU / LULUCF, and forest-based measures under ecosystem-based adaptation and/or nature-based solutions? If so, progress, no progress, or decline?
Deforestation targets	Does it report progress on specific deforestation targets? If so, progress, no progress, or decline? Is it aligned with paragraph 33 of the Paris Agreement?
Forest degradation targets	Does it report progress on specific degradation targets? If so, progress, no progress, or decline?
Forest restoration targets	Does it report progress on specific restoration targets? If so, progress, no progress, or decline? Which are the most common forest restoration targets?
Key policy measures	Does it include any mention of key policy measures (e.g. REDD+, protected areas, forest governance, sustainable forest management, agroforestry, etc.)?
Forest-based adaptation measures	Does it report progress on forest-based adaptation measures? If so, progress, no progress, or decline?
Role of marginalized groups	Does it include any mention of vulnerable and/or marginalized groups (e.g., women, Indigenous Peoples, local communities)?
Measurement, reporting and verification (MRV) and monitoring, evaluation and learning (MEL)	Does it include MRV, MEL or other adaptation reporting processes (and, if information is available, include forests within these)?
Biodiversity	Does it recognize forests as crucial for biodiversity conservation?

After extracting the relevant information from each BTR, data quality control was performed by three individual reviewers and inconsistencies were addressed. The data was analysed using semi-automatic methods in Microsoft Excel to assess the extent to which Parties reported on the predefined review criteria.

To ensure consistency and comparability across reports, a standardized progress classification framework was applied. This framework accommodates both numerical targets (e.g., expressed as percentages or hectares) and qualitative policy commitments (e.g., REDD+ strategies). Progress was categorized into three mutually exclusive and collectively exhaustive categories, as shown in Table 6 below:

Table 6. BTRs assessment categorization

Assessment level	Description
Progress	Evidence of measurable or clearly described advancement toward a stated target. This included: • Reported percentage of goal attainment for a numerical target (e.g., "Reduce emissions from deforestation to X $MtCO_2$ by 2030; progress reported: Y%"). • Reported absolute value achieved toward a numerical target (e.g., "Restore X hectares by 2030; achievement by 2022: Y hectares"). • Explicit confirmation of completion or partial completion of a policy-based commitment (*e.g.*, "Develop and begin implementing the National REDD+ Strategy by 2025"; progress reported by 2022: Y%).
Unclear	Reference to a target or policy commitment without sufficient information to determine measurable progress. This included: • Presence of a numerical target without indication of attainment (e.g., "Achieve a deforestation target of X% by 2030"; progress: "under implementation" or no information reported). • Policy-based commitments described only as "in progress", or "ongoing", without quantification of advancement.
No progress	Explicit evidence of target non-achievement. This included: • Direct statements of no advancement (e.g., "Reduce deforestation by X% by 2030; progress by 2022: 0%"). • Textual indications of stagnation (e.g., "no progress", "not initiated").

The reports were also checked for explicit or equivalent references to the commitment to halt deforestation by 2030 (paragraph 33). This included:

- Direct mentions of halting or reducing deforestation by 2030.
- Alternative formulations consistent with the objective (e.g., "Maintain deforestation rates below X% by 2030").

The progress classification framework was systematically applied across all review dimensions. However, not all Parties reported information for every dimension: for instance, some countries included deforestation targets but omitted restoration targets. Once the classification framework had been applied, the corresponding percentages were calculated and recorded.

In addition, complementary information was extracted and analysed to identify:

- The most reported restoration measures in BTRs and their frequency (percentage of Parties reporting them).
- The most reported key policy measures and their frequency.
- The most reported forest-based adaptation measures and their frequency.

Table 7. List of reviewed BTRs

Country	Date of submission
Algeria	30/12/2024
Andorra	26/10/2023
Argentina	19/12/2024
Australia	19/12/2024
Azerbaijan	21/11/2024
Belarus	30/12/2024
Belize	31/12/2024
Bhutan	31/12/2024
Bolivia	31/12/2024
Brazil	13/12/2024
Brunei Darussalam	31/12/2024
Burkina Faso	28/12/2024
Cambodia	31/12/2024
Canada	30/12/2024
Central African Republic	31/12/2024
Chile	30/12/2024
China	31/12/2024
Colombia	31/12/2024
Costa Rica	31/12/2024
Côte d'Ivoire	31/12/2024
Cuba	31/12/2024
Ecuador	27/12/2024
Egypt	30/12/2024
Eswatini	30/12/2024
European Union	22/11/2024
Gabon	31/12/2024
Georgia	31/12/2024
Ghana	28/12/2024
Guatemala	24/03/2025
Guinea-Bissau	25/12/2024
Guyana	03/04/2024
Honduras	31/12/2024
Indonesia	24/12/2024
Israel	03/04/2025

Women work to clear weeds in Mahila Jagaran Community Forest, a community forest run solely by women, Karnali corridor, Nepal.. © James Morgan / WWF-US

Japan	31/12/2024
Kazakhstan	09/11/2024
Kenya	24/12/2024
Korea (Republic of)	10/02/2025
Lebanon	31/12/2024
Liechtenstein	05/02/2025
Malaysia	31/12/2024
Maldives	16/11/2024
Mauritius	24/12/2024
Mexico	27/12/2024
Moldova	29/01/2025
Monaco	21/02/2025
Montenegro	24/02/2025
Morocco	30/12/2024
Namibia	31/12/2024
New Zealand	18/12/2024
Niger	31/12/2024
Nigeria	30/12/2024
Norway	17/12/2024
Pakistan	31/12/2024
Panama	30/06/2024
Paraguay	27/12/2024
Peru	31/12/2024
Philippines	31/03/2025
Russian Federation	31/12/2024
Rwanda	31/12/2024
Saudi Arabia	24/03/2025
Serbia	31/12/2024
Singapore	11/11/2024
South Africa	20/12/2024
Sri Lanka	31/12/2024
Switzerland	16/12/2024
Tajikistan	27/12/2024
Thailand	26/12/2024
Trinidad and Tobago	30/12/2024
Tunisia	30/12/2024
Turkey	07/11/2024
United Kingdom of Great Britain and Northern Ireland	24/12/2024
United States of America	19/12/2024
Uruguay	31/12/2024
Uzbekistan	29/12/2024
Vanuatu	20/02/2025
Vatican City	13/02/2025
Venezuela	02/01/2025
Zimbabwe	31/12/2024

Methodology for review and analysis of NDCs

The assessment covers 39 NDCs from countries with significant forest resources, as identified using FAOSTAT forest cover data. NDCs from Parties with less than 100,000 hectares of forest are not included. This ensures that the review focuses on Parties where forest-related measures are likely to have significant climate implications.

To ensure the methodology reflects the evolving standards of the Paris Agreement, the assessment aligns with the requirements for increasing ambition over successive NDC cycles. In accordance with UNFCCC guidance, Parties were required to submit their updated NDCs 3.0 in 2025, considering outcomes from the Global Stocktake. For inclusion in this review, NDC 3.0 submissions had to be officially published and accessible by 28 September 2025. The analysis and findings will be updated after COP30 in November to cover all NDCs 3.0 from this group submitted by 31 December 2025. The NDCs reviewed were downloaded from the official UNFCCC NDC registry.

To assess the integration of forest-related targets and measures, the authors identified a set of critical forest-related criteria, which are vital for climate mitigation and are supported by a strong evidence base. The criteria underwent careful refinement to ensure robustness and relevance. These criteria are explained in Table 8 below.

Tun Mustapha Park, Malaysia.
© WWF-Malaysia / Mazidi Abd Ghani

Table 8. NDC review criteria

Review dimension	Categories	Review notes/keywords
Economy-wide and forest-related emission mitigation targets	Overall economy-wide emissions mitigation target	For countries with conditional and unconditional targets, add both. For countries with multiple scenarios (that are not conditional/unconditional), select most ambitious mitigation target.
	LULUCF, AFOLU, FOLU, LUCF mitigation target	For countries with conditional and unconditional targets, add both. For countries with multiple scenarios (that are not conditional/unconditional), select most ambitious mitigation target.
	Other forest-related sectoral mitigation target	Add any other forest-related emissions target that does not fall into a "LULUCF AFOLU FOLU LUCF" category.
Quantitative forest targets (emissions or non-emissions) Quantitative forest targets (emissions or non-emissions)	Does it mention paragraph 33 of GST (overall)?	Explicit reference to paragraph 33 in any part of NDC
	Does it mention paragraph 34 of GST (overall)?	Explicit reference to paragraph 34 in any part of NDC
	Does it mention paragraph 33 of GST (mitigation section)?	Explicit reference to paragraph 33 in the mitigation section of the NDC
	Deforestation target (mitigation section)	Deforestation; tree cover loss; forest loss; conservation; protection; no/reduced deforestation; switch from fuelwood to other renewable energy; improved cookstoves; cookstoves that use liquid or gaseous fuel (ethanol, LPG); sustainable charcoal production; wood energy plantations *For the purpose of this assessment, references to 'maintaining' or 'conserving' forest cover are interpreted as actions aimed at reducing deforestation.*
	Deforestation target (adaptation section)	
	Forest degradation target (mitigation section)	Degradation; degraded; forest degradation; switch from fuelwood to other renewable energy; improved cookstoves; cookstoves that use liquid or gaseous fuel (ethanol, LPG); sustainable charcoal production; wood energy plantations
	Forest degradation target (adaptation section)	
	Forest restoration target (mitigation section)	Restoration; reforestation; afforestation; forest restoration; forest and landscape restoration (FLR); tree planting; seedling; nursery; green belts; rewetting/restoration of forests; plantations on drained peatlands; assisted regeneration
	Forest restoration target (adaptation section)	
	Primary forests target (mitigation section)	Primary forests; old growth forests; old-growth forests; intact forest
	Primary forests target (adaptation section)	
	Sustainable forest management target (mitigation section)	Sustainable forest management; sustainable forestry; community-based forest management; silviculture; national forest inventory
	Sustainable forest management target (adaptation section)	
	Key Biodiversity Areas target – specific to forests (mitigation section)	Key Biodiversity Areas, KBAs
	Key Biodiversity Areas target – specific to forests (adaptation section)	

Quantitative or qualitative forest-related measures mention	Protected areas measures (mitigation section)	Protected areas; conservation area; moratoria; moratorium
	Protected areas measures (adaptation section)	
	Sustainable forest management measures (mitigation section)	Sustainable forest management; sustainable forestry; SFM; silviculture; national forest inventory; sustainable forest management for fire risk
	Sustainable forest management measures (adaptation section)	
	Payments for ecosystem services measures (mitigation section)	Payments for ecosystem services; PES; alternative income schemes
	Payments for ecosystem services measures (adaptation section)	
	Forest governance measures (mitigation section)	Corruption; illegal logging; illegal timber; land grabbing; land tenure; tenure rights
	Forest governance measures (adaptation section)	
	Community forest management measures (mitigation section)	Community forest management; community forestry; participatory forest management; social forestry
	Community forest management measures (adaptation section)	
	Agroforestry measures (mitigation section)	Agroforestry; agro forest; silvopastoral systems; grazing with trees; crops-trees; wind break; shelter belt; leguminous tree; trees on farms
	Agroforestry measures (adaptation section)	
	Mangrove management measures (mitigation section)	Mangrove conservation, restoration, protection, restoration; buffer zones, protecting mangrove areas for retreat, restoring natural tidal flows; ridge-to-reef approach; blue carbon/economy when mangroves are mentioned
	Mangrove management measures (adaptation section)	
	DCF supply chains measures (mitigation section)	DCF; deforestation-free; deforestation free; conversion-free; zero-deforestation; zero deforestation; zero conversion; zero-conversion; due diligence; imported deforestation; EUDR
	DCF supply chains measures (adaptation section)	
	REDD+ measures (mitigation section)	REDD+; Reducing Emissions from Deforestation and Forest Degradation
	REDD+ measures (adaptation section)	
MRV and MEL systems	Mentions of forest within MRV sections	Within MRV section: forest, forestry, deforestation, degradation, tree cover, REDD+; forest inventory; monitoring system; NFMS; FREL; FRL
	Mentions of monitoring evaluation and learning (MEL)	Monitoring, evaluation and learning (MEL) for forests
Considerations of marginalized groups	Gender considerations	Women, gender, gender-responsive
	Inclusion of Indigenous Peoples and local communities	Indigenous, local, communities, IP, IPs, LC, LCs, IPLC, IPLCs

Synergies with biodiversity and other national and global goals	Biodiversity	Biodiversity (any mention); genetic diversity; genetic resources; ecosystem diversity; ecotypes; species richness
	CBD/GBF/NBSAPs	Global Biodiversity Framework, GBF, Convention on Biological Diversity, CBD, National Biodiversity Strategy and Action Plan, NBSAP
	Global Goal on Adaptation, UAE Framework Targets	Global Goal on Adaptation, UAE Targets; adaptation / resilience indicators; adaptation targets;
	SDGs	Sustainable Development Goals, SDG, SDGs; 13; 15
	NAPs	National Adaptation Plans, NAP, NAPs; NAPAs; adaptation planning; strategy
	UNCCD	UNCCD, United Nations Convention to Combat Desertification, Land Degradation Neutrality (LDN)

Each NDC was screened manually against the above-mentioned criteria. Findings were systematically recorded on a structured assessment template in Microsoft Excel, which was subsequently used for comparative and in-depth analysis.

WWF is working in the Mai Ndombe region of the Democratic Republic of Congo to build community engagement in reducing emissions from deforestation and forest degradation, also known as REDD+. © WWF-US / Julie Pudlowski

ENDNOTES

1 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

2 Forest Declaration Assessment Partners (2025).

3 Forest Declaration Assessment Partners (2025).

4 UNFCCC (2023) Outcome of the first global stocktake. Draft decision. FCCC/PA/CMA/2023/L.17.

5 Based on national forest cover data from the Food and Agriculture Organization of the United Nations (FAO 2020).

6 Based on FAO (2020) Global Forest Resources Assessment 2020 – Key findings. Rome.

7 McCabe, K. (2025) World exceeds 1.5°C threshold for entire year for the first time. Royal Meteorological Society, January 10.

8 Sakschewski, B., Caesar, L., Andersen, L., Bechthold, M., Bergfeld, L., Beusen, A., et al. (2025). Planetary Health Check 2025: A Scientific Assessment of the State of the Planet. Potsdam Institute for Climate Impact Research.

9 WWF (2024) Living Planet Report 2024 – A System in Peril.

10 UNFCCC (2021) Knowledge gaps in integrating forest and grassland biodiversity and ecosystems into adaptation strategies. Scoping paper. UNFCCC, Bonn.

11 UNFCCC (2021) Knowledge gaps in integrating forest and grassland biodiversity and ecosystems into adaptation strategies.

12 Tomalka, J., Hunecke, C., Murken, L., Heckmann, T., Cronauer, C., Becker, R., et al. (2024). Stepping back from the precipice: Transforming land management to stay within planetary boundaries. Potsdam Institute for Climate Impact Research.

13 Harris, N. and Gibbs, D. (2021). Forests Absorb Twice As Much Carbon As They Emit Each Year. World Resources Institute, 21 January.

14 Streiff, L. (2021) NASA Satellites Help Quantify Forests' Impacts on Global Carbon Budget. NASA. Retrieved from /.

15 Harris, N. and Gibbs, D. (2022) Forest Carbon Stocks. World Resources Institute.

16 FAO. 2025. Global Forest Resources Assessment 2025. Rome.

17 WWF (2022) The role of forests in the post-2020 Global Biodiversity Framework.

18 FAO (2023) Asia-Pacific Forestry Commission (APFC).

19 CBD (2024) The Forest Factor: The role of protection, restoration and sustainable management of forests for the implementation of the Kunming-Montreal Global Biodiversity Framework.

20 FAO (2019) Forests: Nature-based solutions for water. Unasylva. An international journal of forestry and forest industries. Vol. 70, No. 1. Rome..

21 FAO (2025) Session Theme: Healthy Forests Feed the Future.

22 Boston Consulting Group (2020) The Staggering Value of Forests—and How to Save Them.

23 Hanusch, M. and Strand, J. (2023) How much should we pay to preserve the Amazon? World Bank Blogs, 8 July.

24 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

25 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

26 Crowe, O., Beresford, A.E., Buchanan, G.M., Grantham, H.S., Simkins, A.T., Watson, J.E.M. and Butchart, S.H.M. (2023). A global assessment of forest integrity within Key Biodiversity Areas. Biological Conservation 286: 110293.

27 Crowe et al. (2023). A global assessment of forest integrity within Key Biodiversity Areas.

28 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

29 Bourgoin, C., Beuchle, R., Branco, A., Carreiras, J., Ceccherini, G., Oom, D., San-Miguel-Ayanz, J., and Sedano, F. (2025) Extensive fire-driven degradation in 2024 marks worst Amazon forest disturbance in over 2 decades. Biogeosciences, 22(19): 5247–5256.

30 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

31 WWF (2021) Deforestation Fronts.

32 Forest Declaration Assessment Partners (2025) Forest Declaration Assessment 2025.

33 Pearson, T.R.H., Brown, S. and Sidman, G. (2017) Greenhouse gas emissions from tropical forest degradation: an underestimated source. Carbon Balance Management 12(3).

34 Csillik, O., Keller, M., Longo, M., Ferraz, A., Rangel Pinagé, E., Görgens, E. B., et al. (2024). A large net carbon loss attributed to anthropogenic and natural disturbances in the Amazon Arc of Deforestation. Proceedings of the National Academy of Sciences, 121(33), e2310157121.

35 Lapola, D. M., Pinho, P., Barlow, J., Aragão, L. E. O. C., Berenguer, E., Carmenta, R., et al. (2023). The drivers and impacts of Amazon forest degradation. Science 379(6630), eabp8622.

36 Pearson, T. R. H., Brown, S. and Sidman, G. (2017).Greenhouse gas emissions from tropical forest degradation: an underestimated source.

37 Mills, M.B., Malhi, Y., Ewers, R.M., Kho, L.K., Teh, Y.A., Both, S., et al. (2023) Tropical forests post-logging are a persistent net carbon source to the atmosphere. Proceedings of the National Academy of Sciences 120(3): e2214462120.

38 Wolf, S. and Paul-Limoges, E. (2023) Drought and heat reduce forest carbon uptake. Nature Communications 14, 6217.

39 Bourgoin, C., Ceccherini, G., Girardello, M., Vancutsem, C., Avitabile, V., Beck, P.S.A., et al. (2024). Human degradation of tropical moist forests is greater than previously estimated. Nature, 631(8021): 570–576.

40 Lenton, T. M., et al. (2025) The Global Tipping Points Report 2025. University of Exeter, Exeter, UK.

41 Flores, B. M., Montoya, E., Sakschewski, B., Nascimento, N., Staal, A., Betts, R. A., et al. (2024). Critical transitions in the Amazon forest system. Nature 626(7999): 555–564.

42 WWF (2022) The Vitality of Forests: Illustrating the Evidence Connecting Forests and Human Health

43 Allen, C.R., Grima, N., Belohrad, V. and Fisher, B. (2025) Forests as Pillars of Social and Economic Resilience. A Global Assessment Report. IUFRO World Series Volume 45

44 Newton, P., Kinzer, A.T., Miller, D.C., Oldekop, J.A. and Agrawal, A. (2020) The Number and Spatial Distribution of Forest-Proximate People Globally. One Earth 3(3): 363–370.

45 Bergstrom, D.M., Wienecke, B.C., van den Hoff, J., Hughes, L., Lindenmayer, D.B., Ainsworth, T.D. et al. (2021). Combating ecosystem collapse from the tropics to the Antarctic. Global Change Biology, 27(9), 1692–1703.

46 UNFCCC (n.d.) Nationally Determined Contributions (NDCs). The Paris Agreement and NDCs.

47 Vaidyula, M. and Rocha, M. (2018) Tracking progress towards NDCs and relevant linkages between Articles 4, 6 and 13 of the Paris Agreement (OECD/IEA Climate Change Expert Group Papers No. 2018/04).

48 Nabuurs, G-J., et al. (2022) Agriculture, Forestry and Other Land Uses (AFOLU). In: IPCC (2022) Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA.

49 Reytar, K. (2024) Protecting Biodiversity Hinges on Securing Indigenous and Community Land Rights. World Resources Institute.

50 Climate Action Tracker (2024). As the climate crisis worsens, the warming outlook stagnates. Warming Projections Global Update.

51 Nabuurs, G-J., et al. (2022) Agriculture, Forestry and Other Land Uses (AFOLU). In: IPCC (2022) Climate Change 2022: Mitigation of Climate Change.

52 FAO. (2023). Forests and biodiversity: a focus on primary forests. Asia-Pacific Forestry Commission: 30th Session.

53 FAO (2023) Forests and biodiversity: a focus on primary forests. Asia-Pacific Forestry Commission: 30th Session.

54 UNFCCC (2023) Outcome of the first global stocktake. Decision 1/CMA.5.

55 UNFCCC (2023)

56 UNFCCC (2025). Nationally determined contributions under the Paris Agreement: Synthesis report by the secretariat. See https://unfccc.int/sites/default/files/resource/cma2025_08.pdf

57 CBD Secretariat (2022) Global Biodiversity Framework Target 3. Convention on Biological Diversity.

58 FAO (2024) Sustainable forest management.

59 Friends of the Earth International secretariat (2018) Community Forest Management.

60 WWF (2022) Paying foresters to provide ecosystem services?

61 ICRAF (2024) What is Agroforestry? World Agroforestry (ICRAF).

62 IPBES (2019) Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

63 Chamberland-Fontaine, S., Thomas Estrada, G., Heckadon-Moreno, S. and Hickey, G. M. (2022) Enhancing the sustainable management of mangrove forests: The case of Punta Galeta, Panama. Trees, Forests and People, 8, 100274.

64 Moberg, E. (2023). Deforestation- and Conversion-Free Agriculture: What's the Difference Between Cutoff Dates and Target Dates?

65 WWF (2021) Deforestation & Conversion-Free Supply Chains: WWF Vision, Guiding Principles & Asks.

66 WWF & Climate Focus (2024) Integrating Deforestation and Conversion-Free Supply Chains into NBSAPs. WWF Policy Report.

67 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).

68 Renfroe, S. (2024) Centering Indigenous Women in Conservation Activities: The Vital Role of Gender Equity in Forest Conservation. WI-HER, 19 March.

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