



Global



The Bonn Challenge and the Paris Agreement: How can forest landscape restoration advance Nationally Determined Contributions?

“Nature-based solutions such as protecting and restoring forests can contribute over one-third of the total climate change mitigation required by 2030 to keep temperature rise below 2°C.”

—Inger Andersen, Director General, IUCN

Climate action is underway. Nationally Determined Contributions (NDCs) are the foundations of transformative low-carbon and climate resilient development pathways through mitigation and adaptation strategies. Climate action is taking different forms – from local to national efforts and policies; and from private to global collaborative initiatives. Yet, greater ambition is needed. Achieving the objectives of the Paris Agreement and de-carbonising economies is not possible without more ambitious, coherent and cost-effective policies across sectors. Nature-based solutions, such as forest landscape restoration (FLR), are crucial in solving the climate change puzzle as they ensure sustained reductions in net emissions across forest landscapes, while simultaneously boosting thriving low-carbon and climate resilient ecosystems, societies and economies.

Making forests – their protection, restoration and sustainable management – a core element of equitable economic growth and sustainable development requires greater ambition; and greater collaboration to catalyse and enable such ambition. FLR opens a window of opportunity for tackling the societal challenges of climate change, food security, human health and wellbeing, and economic and social development through reducing deforestation, boosting agricultural productivity and reducing poverty.

The Bonn Challenge – a global effort to bring 150 million hectares of degraded and deforested land into restoration by 2020 and 350 million hectares by 2030 – harnesses the power of FLR, offering an excellent opportunity for fully unlocking the mitigation potential of forests and making more ambitious NDCs feasible, while enhancing the resilience of ecosystems and societies.

This forest brief presents the findings from the IUCN and Climate Focus rapid analysis of NDCs as well as the more in depth review by IUCN of NDCs for countries which have made pledges to the Bonn Challenge – as a first step for enhancing the ambition and implementation of NDCs.

Analysing Nationally Determined Contributions and catalysing their potential

While the crucial role of forests is broadly acknowledged by the climate change community, and explicitly recognised in the Paris Agreement,¹ the need to strengthen technical capacities at the national level to increase confidence on mitigation potential estimates, as well as inherent complexities of the sector, remain a challenge for more ambitious climate action in the sector – as evidenced in countries' NDCs.

Forest references are deeply embedded in countries' NDCs, however they vary significantly. The analysis conducted by IUCN and Climate Focus shows that 77% of NDCs contain references to ambitious and detailed – ongoing or planned – efforts in the forest sector, including FLR, that are relevant for national actions in the context of climate change. Yet, only 74% of NDCs include forest-related targets, and only 20% of those include quantifiable targets corresponding to the forest sector, either under economy-wide or sectoral approaches. Furthermore, when considering those NDCs with forest-relevant elements,² only 8% include targets expressed in tons of carbon dioxide equivalent.

In terms of economy-wide NDCs, 91 Parties have included forests as part of economy-wide targets, yet 65% of those are conditional upon the provision of international support. For example, Brazil's NDC, while emphasising the unconditional nature of the country's economy-wide target, reiterates the need for increased international support for actions that require large-scale transformations in the forest sector, particularly concerning the permanence of results-based REDD+ actions and ambitious efforts for forest restoration and reforestation.

When it comes to forest-specific mitigation targets, notably 20 NDCs are sectoral and only eight have an unconditional nature. For example, this is the case for Chile and Malawi. Chile has committed to sustainably develop and recover forest land, as well as to reforest, however, this is contingent on the strengthening and enforcement of national legislation. In the case of Malawi, non-binding but anticipated efforts are enshrined in actions to enhance the protection and conservation of protected areas as well as restoration.

Furthermore, interestingly, despite the significant number of countries making references to the forest and land sector in their NDCs, 26% of them explicitly exclude forests from their targets. Such exclusion of the forest sector from NDC targets may result from multiple reasons, for



example, on-going or planned national policies and efforts not considered under NDC targets; national priorities in the forest sector with a focus on REDD+ implementation that are beyond (or complementary to) NDC targets; limited capacities – or the need for further methodological clarifications; an adaptation focus for the forest sector under NDCs; and conditionality to international support. Accordingly, a combination of such reasons, in addition to the inherent complexities for effectively reducing net emissions from the sector, entail challenges for more ambitious climate action in the sector – thus more ambitious NDCs.

So, how can the global climate change community contribute to fully unlocking the mitigation potential of forest through more ambitious NDCs? How can the mitigation potential of the forest and land sector be translated into powerful and truly effective and cost-efficient mitigation strategies?

Countries' submitted NDCs	FLR targets and/or references in NDCs
77 %	Include FLR references under NDC targets and unilateral on-going or planned efforts (127 NDCs)
26 %	Explicitly exclude the forest sector from NDC targets
74 %	Explicitly include FLR under NDC targets (including mitigation, adaptation, economy-wide and sectoral, unconditional and conditional targets) ³ 75% Economy-wide targets 16% Sectoral targets 20% Quantifiable targets (both in ha and tons) 8% Quantifiable targets in tons of CO ₂ 7% Unconditional targets

Box 1: Forest landscape restoration in Parties' NDCs (165 NDCs considered)

Forest landscape restoration: Unlocking the mitigation potential of forests

There is unequivocal evidence that achieving the objectives of the Paris Agreement will only be possible by halting deforestation and reversing its impacts through effective protection, restoration and sustainable management of forests. Meanwhile, the loss of healthy soils and nutrients derived from forest and land degradation can lead to food insecurity, with the potential impact of reducing global food production by 12% and increasing the price of some commodities by as much as 30%.⁴ Well-managed forest landscapes can provide essential ecosystem services and social benefits, and support thriving, climate-resilient ecosystems and societies. Landscape approaches are essential and urgent for enabling effective efforts to reduce emissions from forest loss, and increase forest carbon stocks, if we aim to reduce global net emissions by 24-30% over the next decade.

About fifteen years ago IUCN began championing FLR and rallying its state and non-state members and other partners to build a global restoration movement based on converting deforested and degraded lands into sustainable and productive landscapes, advancing the rights and interests of forest communities, taking the pressure off natural forests, engaging public and private investors, and designing and supporting the implementation of effective forest and land-use policies.

FLR is a cost-effective nature-based solution which promotes multifunctional landscapes and aims to regain a balance of ecological, social and economic benefits from forests and trees. FLR benefits extend well beyond an increase in the density of trees on the land, including: boosting landscape productivity; improving food and water security; conserving biodiversity; strengthening the governance of forest landscapes; reducing disaster risk, combatting desertification; and, importantly, unlocking the adaptation and mitigation potential of forest and non-forest ecosystems.

A recent study by Griscom et al.⁵ highlights the urgent role that nature-based solutions – such as FLR – play for fully unlocking the mitigation potential of forests, providing over a third of the cost-effective mitigation required by 2030 for achieving the 2°C objective under the Paris Agreement.

Griscom's study refers to restoration and improved land management as available and immediate natural climate solutions for releasing not only the mitigation potential of forests but also for enhancing ecosystem and societal resilience, while delivering additional environmental services including those for water, biodiversity and soil. The forest landscape restoration approach is thus crucial for informing the design and implementation of effective and sustained climate action across landscapes and sectors.

In advancing the operationalisation of the FLR approach, IUCN has, among other things, contributed to equipping decision-makers in 36 jurisdictions in 26 countries⁶ with critical understanding on the forces driving forest degradation and strategic cost-effective policy options and actions for restoring their forest landscapes, through the application of the Restoration Opportunities Assessment Methodology (ROAM). Moreover, by addressing the drivers of deforestation and forest degradation, ROAM assessments have contributed to the identification and design of strategic interventions across multiple levels to reduce the pressure on primary forests, ultimately informing the design of national REDD+ strategies or action plans and restoration policies.

To bolster the global restoration movement, in 2003 IUCN initiated the Global Partnership on Forest Landscape Restoration (GPFLR), as a proactive network for promoting the FLR approach. The movement received new impetus with the Bonn Challenge launched by IUCN and the Government of Germany in 2011. The Bonn Challenge is a clear signal of ambitious political will in recognition to the significant role of such integrated landscape approaches for delivering multiple social and environmental benefits across sectors, in contrast to narrower localized approaches as straightforward reforestation.



Photo: Patricia Ugalde

Leveraging the Bonn Challenge to catalyse the implementation of the Paris Agreement

The Bonn Challenge can drive the implementation of the Paris Agreement for unlocking the mitigation potential of forests by catalysing negative emissions through FLR implementation. To date, the Bonn Challenge has secured over 160 million hectares in pledges, yet success cannot be measured in terms of political commitments alone. Successfully achieving low-carbon and climate resilient integrated forest landscapes through FLR requires urgently aligning domestic policies and investments that deliver ambitious, coherent and cost-effective policies across sectors interacting in such landscapes.

The rapid analysis of Parties' NDCs jointly conducted by IUCN and Climate Focus provided valuable insights on how countries view FLR not only in the context of their ambition and mitigation potential, but also under broader national policies. While NDCs suggest that FLR is embedded in national policies and priorities in the context of climate change, a smaller number of countries express unconditional commitments in the form of NDC targets. Moreover, the analysis highlights the remaining challenges for effective alignment of international commitments and national priorities for cost-effective interventions and investments. When contrasting Parties' NDCs with pledges by countries under the Bonn Challenge, the analysis suggests a mismatch in terms of commitments and/or ambition.

A more detailed analysis of NDCs of the countries with pledges under the Bonn Challenge, conducted by IUCN, points to the potential role of the Bonn Challenge in advancing the implementation of the Paris Agreement. The analysis shows that 31% of Bonn Challenge countries have included quantifiable targets for the forest sector, both conditional and unconditional in nature – three of those countries have sectoral NDCs, and two of those include quantifiable targets expressed in tons of CO₂ equivalent – expressing the only explicit mitigation quantifiable targets. What is more, three Bonn Challenge countries have included quantifiable references to FLR as part of their NDCs, yet, such references do not correspond to NDC targets but rather to additional information on existing or planned policies and actions, even when two of those are sectoral NDCs. In all cases with quantifiable targets or references under their NDCs however, NDC values are often lower than those pledges made under the Bonn Challenge. Such findings suggest the remaining technical challenges that countries still face for enhancing their NDC targets when it comes to reliable and accurate estimates of the mitigation potential of the forest sector, and moreover, the great challenge that countries face for robust measuring, reporting and verifying mitigation outcomes in the forest sector.

The analysis also indicates that 56% of the Bonn Challenge countries have not included quantifiable references or targets for the forest sector as part of their NDCs. Of those, three countries have explicitly excluded the forest sector from their NDC, and interestingly, one expressed a forest-sectoral commitment.⁸ Notably, while 6% of Bonn Challenge countries have included the same quantifiable national restoration objective explicitly under both their Bonn Challenge pledge and their NDC submissions, they have also explicitly excluded the forest sector from their NDC sectors subject to targets.

IUCN is confident that the Tanaloa Dialogue⁹ will be a great opportunity for strengthening collaboration and learning among state and non-state actors to 'enable, facilitate and encourage action'.¹ Effective and coherent alignment of national policies and international commitments requires efficient cross-sectoral coordination at the national level, and consistency and ambitious international support that fosters faster and ambitious climate action. Yet, further analysing and understanding the technical, financial and governance opportunities and challenges that countries face will be crucial to enable countries to move from ambition to actual targets under NDCs.

Percentage of Bonn Challenge pledgers	FLR targets / references in NDCs
31 %	Include quantifiable FLR targets, expressed in tons or ha, with unconditional and/or conditional nature
14 %	Include sectoral targets
8 %	Include targets expressed in tons
56 %	Do not include quantifiable restoration targets or references
14 %	Explicitly exclude the forest sector from NDC targets

Box 2: Nationally Determined Contributions of Bonn Challenge Pledgers (36 countries)

As Parties continue to engage in the development of the Paris Agreement rulebook, and the climate change community approaches the start of the Tanaloa Dialogue, IUCN will continue to contribute with global, regional, national and local experiences and stories of success and progress from advancing nature-based solutions such as FLR, as immediate cost-effective options already available and proven at multiple scales across the globe. IUCN will continue to work with its state and non-state members and partners in promoting and supporting large-scale transformations for building thriving, low carbon and climate resilient sustainable development paths, by informing robust, ambitious and implementable policy instruments across forest landscapes.



Footnotes

1. UNFCCC Decision 1/CP.21, Article 5.
2. 127 Nationally Determined Contributions under the Interim NDC Registry and those additional INDCs under the submissions portal.
3. Percentage illustrated below estimated considering NDCs with FLR targets only (122 countries' NDCs).
4. IFPRI. 2012. Global Food Policy Report <http://www.ifpri.org/publication/2012-globalfood-policy-report>
5. Natural Climate Solutions. 2017. Griscom et al. <http://www.pnas.org/content/114/44/11645.full.pdf>
6. Brazil, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Burundi, Cameroon, Cote d'Ivoire, DRC, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Rwanda, Uganda, Cambodia, China, India, Indonesia, Myanmar, Vietnam.
7. Expressed in tons of CO₂ eq per year or in hectares.
8. Expressed as enhanced carbon sequestration capacity.
9. Tanaloea Dialogue <http://unfccc.int/items/10265.php>

Further reading

- UNFCCC Paris Agreement webpage http://unfccc.int/paris_agreement/items/9485.php
- [InfoFLR.org](http://infoflr.org) - For additional data, download the accompanying NDCs analysis table

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