

From Glasgow to Kunming: Climate and biodiversity together at last?

Doreen Stabinsky

The Convention on Biological Diversity (CBD)'s 15th Conference of the Parties (COP15) and United Nations Framework Convention on Climate Change (UNFCCC) COP26 processes have carried on in parallel during the past two years. A diverse set of actors, with varying intentions, have sought to link the processes including through the incorporation of the concept of "nature-based solutions" (NbS) into both outcome documents.¹ Coupled with this is the focus on the mitigation potential of "nature" (measured in Gt CO₂e per year) and, implicitly, the value that this amount, once commoditized and monetized, could leverage from carbon markets.

The most recent draft of the post-2020 Global Biodiversity Framework (post-2020 GBF) of the CBD links climate change and biodiversity most explicitly in Target 8, in the group of targets focused on reducing threats to biodiversity:

Target 8. Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 GtCO₂e per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity.²

Climate change clearly has the potential for enormous negative impacts on biological diversity, impacts that are already evident and growing, and a prominent focus on reducing those threats and impacts is entirely appropriate for the post-2020 GBF. The logic for including a climate mitigation goal in the GBF is, however, questionable and suggests that there are other interests at play. The three objectives of the CBD, found in

¹ Gavin Edwards of WWF "said that if the final Cop26 text references nature-based solutions, it will 'strengthen the hand for it to be included in the CBD [Kunming biodiversity agreement]'.¹" <https://www.climatechangenews.com/2021/11/11/nature-based-solutions-prove-divisive-glasgow-climate-talks/>

² Draft from 5 July 2021. CBD/WG2020/3/3. This "first draft" will be the basis of negotiations at the resumed meeting of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework, currently scheduled as an in-person meeting in March 2022. Also relevant is the headline indicator 8.0.1 "National greenhouse gas inventories from land use and land use change" found in the 11 July 2021 draft of proposed headline indicators. CBD/WG2020/3/3/Add.1.

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Article 1 of the Convention, are “*the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources...*” A direct link with climate mitigation is not particularly evident.

Similarly, the climate change regime under the UNFCCC understandably does not directly address the threats that climate change poses to biological diversity. The objective of the UNFCCC, articulated in Article 2, is to achieve “*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*” In the UNFCCC context, biodiversity might be viewed in terms of the carbon it contains and might lose (as greenhouse gas emissions) or the carbon that it could contain and might gain (as a sink for emissions). The convention’s objective continues, that “[s]uch a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change...”, but this phrase is obviously subsidiary, qualifying the primary stabilization objective. For the UNFCCC, it is greenhouse gases and above all carbon dioxide, not biodiversity, that matters.³

Given these differences between objectives, we should not expect that the intersections between biodiversity and climate change would be straightforward in the context of how the two main treaties address these topics. Indeed, the linkages are important and should be addressed coherently. There are ongoing initiatives to make stronger and more direct linkages through implementation of both treaties. One proposed link that stands out is the inclusion of the climate mitigation target in Target 8 of the first draft of the GBF: “*contributing at least 10 GtCO₂e per year to global mitigation efforts.*”⁴ It can be argued that such a numerical target, focused on mitigation, belongs under the UNFCCC, not the CBD.

This brief considers several outcomes of the recent UNFCCC Conference of the Parties in Glasgow that might have a bearing on the negotiations on the post-2020 GBF and that might provide insight into why some Parties to the CBD are eager to include a climate mitigation target in the post-2020 GBF, which is expected to be adopted by CBD COP15 when the second part of the conference convenes in Kunming later in 2022. It first explores connections between the outcomes on carbon markets (Article 6 of the Paris Agreement), biodiversity, and nature-based removals. This leads clearly to considerations of finance and resource mobilization: the quantity “10 Gt CO₂e” signifies not merely the amount of carbon dioxide emissions that might be avoided or carbon that might be removed from the atmosphere, but implicitly hints at the value of that 10 Gt in a global carbon market and in non-market resource-mobilization strategies. Finally, contentions around use of the term “nature-based solutions” at the UNFCCC are briefly summarized.

I. Carbon markets, biodiversity, and nature-based removals

“Nature”, or at least the carbon that is contained in organisms and ecosystems, is considered by many to be an essential product to be traded under the new market mechanisms of the Paris Agreement. This desire for commodification and exchange of biodiversity-based carbon will have a range of implications for continuing negotiations on the post-2020 GBF. For example, there is a not-insignificant hope that carbon markets might be able to mobilize resources for biodiversity protection. The CBD’s Panel of Experts on Resource Mobilization⁵ suggested that a key action to generate additional resources would be to

[i]ncrease direct and indirect biodiversity-related international development finance for developing countries and countries in transition, including climate and other development finance:

...

³ Carbon dioxide is the predominant greenhouse gas in the atmosphere, with anthropogenic contributions to atmospheric concentrations coming primarily from the burning of fossil fuels and other human activities including deforestation and production of cement. Carbon is the main constituent of all living organisms and plants fix carbon directly from carbon dioxide in the atmosphere. These different forms that carbon takes in the environment – carbon and carbon dioxide – are why sometimes references are made to the gas and sometimes to carbon alone.

⁴ For a brief introduction to the figure 10 Gt CO₂e, where it comes from, and what it means, see: “Nature-based solutions (NbS) and claims about their mitigation potential,” Doreen Stabinsky, TWN Briefing Paper, October 2021. https://www.twn.my/title2/briefing_papers/twn/NbS%20mitigation%20TWNBP%20Oct%202021%20Stabinsky.pdf

⁵ Third report of the Panel of Experts on Resource Mobilization. CBD/SBI/3/5/Add.3.

(c) Funding for natural solutions for climate change adaptation and mitigation that deliver co-benefits for biodiversity should be identified and scaled up ... This includes adopting blue carbon as well as forest carbon into regulatory and voluntary carbon offset markets, and supporting regenerative agriculture, which ensures increasing productivity, adaptation through resilience, and mitigation benefits.

Two points to be taken from this text help to frame biodiversity-related reflections on Glasgow outcomes:

- revenues derived from carbon trading in regulatory and voluntary carbon offset markets⁶ are seen as an element of “biodiversity-related international development finance”; and
- funding for “natural solutions” should come from incorporating blue (ocean-based) carbon and forest carbon into regulatory and voluntary carbon markets.

The role of “removals”

How might carbon markets mobilize resources for biodiversity? What exactly is the link between carbon markets, biodiversity, and climate change mitigation? In one word: removals.

There are three ways to mitigate climate change: stop or ***avoid emissions*** of greenhouse gases (for example, through stopping deforestation); ***reduce emissions*** through altered management practices; and ***increase removals*** of greenhouse gases from the atmosphere into natural or engineered sinks. One way that protecting biodiversity may bring about mitigation co-benefits is through increasing the amount of carbon that can be removed and stored (the more technical term often used is “sequestered”) by restoring degraded forests, grasslands, mangroves, or agroforestry systems. Then, the theory goes, by monetizing that sequestered carbon, counting it and commodifying it as a carbon “offset”, carbon market resources could be mobilized for biodiversity protection. Markets have had much less interest in avoided emissions, for example by protecting standing forests, which is explained in a later section.

Of course, carbon credits generated in this way are most often sold to entities that want to carry on emitting greenhouse gases, with the credits purchased merely used to compensate in some way for those ongoing emissions. But that compensation (“offsetting”) cannot be considered real or one-to-one for a long list of reasons.⁷ And if emissions continue, warming continues, and the current climate change threat to biodiversity continues.⁸

Paris Agreement Article 6 on “cooperative approaches”: carbon trading, carbon markets, and non-market approaches

In Glasgow, Parties concluded negotiations on overarching rules for Article 6 of the Paris Agreement although many details, and devils therein, remain outstanding. Article 6 includes three “approaches” to cooperation: Article 6.2, on carbon trading between Parties (using units called ITMOs – internationally transferred mitigation outcomes); Article 6.4, a market mechanism for trading in emission reductions (the units to be traded are called A6.4ERs), which could be between Parties or private entities; and a framework for non-market approaches, created under Article 6.8.

⁶ Regulatory markets are organized and driven by national, subnational, or supranational governments in the context of legal regimes to regulate carbon emissions. Voluntary markets include and are operated by a diverse range of private sector and non-governmental actors, with the ostensible purpose of selling carbon credits for the “offsetting” of emissions – one emitting entity purchasing an “offset” credit from another entity that is theoretically doing something good for the climate.

⁷ See, for example, *Making Climate Policy Work* by Danny Cullenward and David Victor, Polity, 2020.

⁸ “Chasing carbon unicorns: the deception of carbon markets and ‘net zero’”, Friends of the Earth International, 2020. <https://www.foei.org/wp-content/uploads/2021/02/Friends-of-the-earth-international-carbon-unicorns-english.pdf>

Article 6.2 trading is primarily related to the fulfilment of Parties' "nationally determined contributions" (NDCs). Parties are obligated to regularly submit an NDC every five years, which contains descriptions of the climate actions they pledge to take. Article 6.2 created the possibility that Parties could fulfil their own NDC pledges by supporting actions that *other* Parties would undertake by purchasing the mitigation outcomes of those actions.

Article 6.4 establishes a mechanism to enable the creation of and trade in emission reduction credits, which perhaps will ultimately come to resemble in many ways the Clean Development Mechanism (CDM) of the Kyoto Protocol. These emission reduction credits will be used in ways similar to carbon offsets that are bought, sold, and traded on the voluntary carbon market. Parties or firms will buy the credits, rather than take climate action themselves, as a way of fulfilling climate mitigation commitments found in their NDCs, obligations for international aviation and shipping under International Civil Aviation Organization (ICAO) and International Maritime Organization (IMO) agreements, or "net-zero" pledges.

Some of the mitigation outcomes and credits to be traded under Articles 6.2 and 6.4 are likely to be "nature-based". Under the new Article 6.2 guidance, ITMOs include "emission reductions and removals". An example of nature-based *emission reductions* would be reductions in the use of synthetic fertilizer on crop plants, thus reducing nitrous oxide emissions. Nature-based *removals* occur when living organisms such as trees take up and store carbon in their tissues.

Still to be debated under the UNFCCC Subsidiary Body on Scientific and Technological Advice (SBSTA), with a decision on the issue to be taken by the Parties to the Paris Agreement at their next meeting in November 2022, is whether ITMOs could include "emissions *avoidance*", such as through avoided deforestation, for example as a result of REDD+ projects.⁹ Avoided emissions were kept out of Kyoto Protocol trading mechanisms, as the purchase of avoided emissions credits obviously does nothing at all to compensate for the greenhouse gases that the purchaser might be emitting. Whether such credits will be allowed under the Paris Agreement mechanisms will be resolved under these SBSTA discussions.¹⁰ The SBSTA is also charged with further elaborating rules under the Article 6.4 mechanism for activities involving removals.¹¹

It is clear from the use of particular scholarly references¹² to support inclusion of the 10 Gt figure in Target 8 of the GBF that the proposed mitigation target is intended to include all three categories of "nature-based" actions: avoiding emissions by avoiding deforestation, reducing emissions (through changes in land and forest management), and enhancing removals. Therefore the UNFCCC debates about removals, emissions reductions, and avoided emissions and which of these should or should not be included in the market mechanisms of Article 6 are material to the proposed climate mitigation element of GBF Target 8. Any inclusion of a climate mitigation target in the GBF may pre-empt these ongoing discussions, which in the first place are better addressed under the UNFCCC, not the CBD.

Target 8 of the GBF should therefore not include a mitigation target. The 10 Gt CO₂e is also not just about a volume of climate mitigation in the abstract. The quantification of potential mitigation is much more about opening the door to including nature within market mechanisms, which is a flawed approach that will do little to protect biodiversity. Carbon offsets do nothing to cut carbon emissions at source and to address climate change, while the demand for "nature" is likely to result in the dispossession of the real stewards of biodiversity, indigenous peoples and local communities.

⁹ REDD+ is "a framework created by the UNFCCC Conference of the Parties (COP) to guide activities in the forest sector that reduces emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries." <https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd>

¹⁰ Decision 2/CMA.3, paragraph 3(c). https://unfccc.int/sites/default/files/resource/cma3_auv_12a_PA_6.2.pdf

¹¹ Decision 3/CMA.3. https://unfccc.int/sites/default/files/resource/cma3_auv_12b_PA_6.4.pdf

¹² The most cited reference over the past few years, and referred to directly or indirectly throughout the negotiations, has been one by Bronson Griscom and co-authors. Griscom, B.W. et al. 2017. "Natural climate solutions". *Proceedings of the National Academy of Sciences*, 114(44), pp.11645-11650.

Furthermore, the mismatch between where the vast majority of biodiversity carbon is actually found (standing forests) and where large amounts of carbon that might be traded would be located (carbon actively removed and sequestered in restored ecosystems or large-scale plantations) has implications for the financing of biodiversity protection through market-based approaches recommended by the Panel of Experts on Resource Mobilization, specifically for the financing of protecting standing forests.

II. Financial flows, “nature-based solutions”, and the UNFCCC Standing Committee on Finance

A key preoccupation of some in the context of the post-2020 GBF is the so-called “finance gap”¹³ between what finance is available for protecting biodiversity and what might be needed. There is ample attention being paid to the question of how to “align” financial flows. In a recent workshop by the CBD,¹⁴ several speakers made note of Article 2.1(c) of the Paris Agreement, which states that one of the aims of the agreement, in strengthening the global response to the threat of climate change, is

(c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

Speakers suggested this is an example of language that could be included in the post-2020 GBF to inspire finance flows for biodiversity protection. They pointed out the need for finance to be directed away from activities that are destructive of biodiversity, such as deforestation, and *towards something*. The question of where private-sector finance will flow to is, however, still an open one, as activities protective of biodiversity are not necessarily those that generate profits for private capital. The authors of the recent UN Environment Programme (UNEP) report on the *State of Finance for Nature* lament this fact, noting that “[c]urrently, the majority of the essential benefits of nature have no financial market value, despite underpinning our current and future prosperity.”¹⁵

However, if removals could be measured, quantified, packaged, and sold; if the climate-mitigation elements of biodiversity could be commodified and securitized, then “nature” could be turned into a new asset class, attracting investment and giving a place for finance to flow, well beyond carbon offset markets.¹⁶

The CBD Expert Panel on Resource Mobilization suggests a need to increase the “biodiversity co-benefits” that can be found in climate actions and associated finance flows, and ideally channel climate finance directly towards biodiversity:

There will also need to be a stronger focus on increasing biodiversity co-benefits resulting from the substantial resources now being mobilized for climate change...¹⁷

Scaling up resources includes increasing flows that are directed primarily towards biodiversity, as well as identifying and increasing biodiversity co-benefits from funding intended primarily to achieve other objectives. Examples of this include integrating nature-based solutions into mitigating and adapting to climate change...¹⁸

¹³ Dempsey, J. et al. 2021. “Biodiversity targets will not be met without debt and tax justice”. *Nature Ecology & Evolution*, pp.1-3.

¹⁴ CBD webinar on “Aligning financial flows with the Post 2020 Global Biodiversity Framework”. 9 December 2021. <https://www.youtube.com/watch?v=N5MIjj-hCik&feature=youtu.be>

¹⁵ *State of Finance for Nature*, United Nations Environment Programme, May 2021. <https://www.unep.org/resources/state-finance-nature>

¹⁶ “NYSE creates asset class for nature-based companies,” *environmentanalyst.com*, 21 September 2021. <https://environmentanalyst.com/global/107318/nyse-creates-asset-class-for-nature-based-companies>

¹⁷ Third report of the Panel of Experts on Resource Mobilization, paragraph 3.

¹⁸ Third report of the Panel of Experts on Resource Mobilization, paragraph 8.

Happening in parallel with these CBD efforts to link climate finance and “nature” is a conversation on “finance for nature-based solutions” being facilitated under the UNFCCC Standing Committee on Finance.

The UNFCCC Standing Committee on Finance (SCF)

In October 2021, the SCF hosted the first part of a two-part forum on ***finance for nature-based solutions***. The high-level summary report from the first part of the forum was noted in the COP decision on matters relating to the SCF (decision 4/CP.26).¹⁹ The second part of the forum is to be held in person in 2022, subject to health and safety considerations arising from the ongoing pandemic.

The summary report from the forum references the potential of “nature-based” actions in addressing both the climate and biodiversity crises and in meeting mitigation and adaptation objectives, with specific references both to “saving” 10 Gt CO₂e per year and to a finance gap. Quoting from the summary:

5. Nature-based actions have the potential to holistically address development and climate priorities and enable sustainable development, and finance for nature-based solutions must be scaled up:

(a) Nature-based solutions can help in addressing both the climate and the biodiversity crisis and in meeting both mitigation and adaptation objectives, with the potential to save 10 gigatonnes of carbon dioxide equivalent per year through the protection, management and restoration of land;

(b) An estimated gap in public and private sector financing for nature-based solutions of USD 4.1 trillion needs to be filled by 2050. There is potential to exponentially increase private sector finance flows for nature;

(c) Natural and social capital need to be incorporated into the global economy, which requires, inter alia, enhancement of quality and quantity of data in order to understand how nature can be reflected in the true cost of goods and services;...

The final UNFCCC decision from Glasgow merely notes the report and requests the SCF to organize the second, in-person part of the forum in 2022. Given this rather tepid reference by the COP, it cannot be in any way interpreted as an endorsement of NbS or how climate finance might or might not be linked with NbS.

It is however clear, from the discussions both at the CBD and at the UNFCCC, that there is a major push to use NbS to leverage carbon markets, in the hope of generating new financial resources for biodiversity. Yet as noted earlier, this is a dangerous bargain to make, as carbon markets enable emissions to continue, and the associated warming threatens the very existence of the biodiversity that is being traded. There is also a general move to commodify and financialize nature, rather than focusing on how biodiversity can be best protected, and by whom. Abjectly missing in these discussions is the role indigenous peoples and local communities play in protecting biodiversity, the urgent need to protect their rights to enable them to continue doing so, and the need to channel resources to these efforts.

¹⁹ High-level summary of the first part of the Standing Committee on Finance Forum on finance for nature-based solutions. https://unfccc.int/sites/default/files/resource/cp2021_10a04_cma2021_07a04E.pdf

III. Nature in the Glasgow Climate Pact

The governing bodies of the UNFCCC (COP) and of the Paris Agreement (CMA) both reference biodiversity in their final overarching decisions comprising the Glasgow Climate Pact (1/CP.26 and 1/CMA.3). The references are not identical in subtle ways, which might merit some reflection, given that in intergovernmental negotiations texts matter.

The preamble to both decisions includes the following paragraph:

Noting the importance of ensuring the integrity of all ecosystems, including in forests, the ocean and the cryosphere, and the protection of biodiversity, recognized by some cultures as Mother Earth, and also noting the importance for some of the concept of “climate justice”, when taking action to address climate change;

Only the preamble to the COP decision references both the adaptation and mitigation benefits of nature (1/CP.26):

Recognizing the interlinked global crises of climate change and biodiversity loss, and the critical role of protecting, conserving and restoring nature and ecosystems in delivering benefits for climate adaptation and mitigation, while ensuring social and environmental safeguards;

The operative paragraphs in both decisions focus more directly on mitigation objectives for nature:

1/CP.26 (paragraph 21):

Emphasizes the importance of protecting, conserving and restoring nature and ecosystems, including forests and other terrestrial and marine ecosystems, to achieve the long-term global goal of the Convention by acting as sinks and reservoirs of greenhouse gases and protecting biodiversity, while ensuring social and environmental safeguards;

1/CMA.3 (paragraph 38):

Emphasizes the importance of protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal, including through forests and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases and by protecting biodiversity, while ensuring social and environmental safeguards;

Earlier versions of the two decisions contained the phrase “nature-based solutions” in each of these paragraphs, as well as the phrase “ecosystem-based approaches.” However, a number of Parties objected to the use of the term “nature-based solutions”;²⁰ references were removed from the final version and replaced with the more specific framing: “protecting, conserving and restoring nature and ecosystems.” In the first drafts, “nature-based solutions” were important for “reducing emissions, enhancing removals and protecting biodiversity.” In the final versions, protecting, conserving and restoring nature and ecosystems is important because of their roles “acting as sinks and reservoirs of greenhouse gases and protecting biodiversity.”

This framing now explicitly spells out what actions are important – “protecting, conserving and restoring nature and ecosystems” – rather than referencing vague and undefined “solutions”.

However, the framing also signals the importance of natural carbon removal (sinks) and storage (reservoirs), unfortunately enabling a link to be made to monetization and trade of carbon removal and storage. Had it made its way into the text, the term “nature-based solutions” might have been an easy shorthand to package

²⁰ “Q&A: Can ‘nature-based solutions’ help address climate change?,” CarbonBrief, 1 December 2021. <https://www.carbonbrief.org/qa-can-nature-based-solutions-help-address-climate-change>

together biodiversity and the monetized biodiversity co-benefits that might derive from selling nature-based carbon. The current wording might still enable that interpretation, but the text is much clearer and hopefully provides more appropriate guidance to biodiversity-related actions to be taken under the climate regime.

The exclusion of the term “nature-based solutions” from the Glasgow Climate Pact however does send a strong signal that the term does not enjoy wide support among Parties and that more explicit language can be found to more directly guide actions to protect biodiversity and address climate change.

While the first draft of the GBF does not include the term “nature-based solutions”, the proposal in Target 8 that biodiversity should be responsible for mitigating 10 Gt CO₂e remains the expression of NbS. Furthermore, there remains a concerted push by some Parties and other actors to include NbS in the GBF text and in other international fora such as at the UN Environment Assembly.²¹ For all the reasons elaborated earlier, the term “nature-based solutions” should not be included in the GBF text, neither should Target 8 include a mitigation target.

It would be important instead for Target 8 of the GBF to focus on what action is needed to protect biodiversity. This would require three elements: 1) a reduction of the threats to biodiversity from climate change; 2) a reduction of the threats from actions that may be taken to address climate change; and 3) prioritization of actions that might be taken to mitigate and adapt to climate change that would enhance biodiversity at the same time.²²

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²¹ The 5th meeting of the UN Environment Assembly (UNEA 5) adopted a resolution on NbS on 2 March 2022.

²² Friends of the Earth International. 2021. Briefing note on Target 8 in the first draft of the post 2020 Global Biodiversity Framework. August. <https://www.foei.org/wp-content/uploads/2021/10/Target-8-Briefing-note.pdf>