


PERSPECTIVE OPEN ACCESS

Avoid Cherry-Picking Targets and Embrace Holistic Conservation to Pursue the Global Biodiversity Framework

James Reed^{1,2}  | Jos Barlow³ | Rachel Carmenta⁴ | Sima Fakheran^{5,6} | Amy Ickowitz¹ | Terry Sunderland^{1,6}

¹Center for International Forestry Research, Bogor, Indonesia | ²School of Global Development, University of East Anglia, Norwich, UK | ³Lancaster Environment Centre, Lancaster University, Lancaster, UK | ⁴Tyndall Centre and the School of Global Development, University of East Anglia, Norwich, UK | ⁵Department of Natural Resources, Isfahan University of Technology, Isfahan, Iran | ⁶Faculty of Forestry, University of British Columbia, Vancouver, Canada

Correspondence: James Reed (j.reed@cifor-icraf.org)

Received: 5 November 2024 | **Revised:** 31 March 2025 | **Accepted:** 2 April 2025

Funding: The authors received no specific funding for this work.

Keywords: biodiversity | conservation | convention on biological diversity | environmental governance | global biodiversity framework

ABSTRACT

The Global Biodiversity Framework (GBF) marked a renewed commitment to addressing the global biodiversity crisis. This framework of four goals and 23 interim targets is intended to guide and accelerate conservation efforts over the next 25 years and is more ambitious than its predecessor, the Aichi 2020 targets. However, the pursuit of multilateral agreements is dependent upon national pledges, and the limited success of the Aichi targets shows that national pledges are of little worth without aligned (sub)national action. We assessed the submitted National Biodiversity Strategy and Action Plans of several member countries to determine their alignment with the bold ambition of the GBF. We find a lack of alignment between the GBF and country submissions across many targets, with the notable exception of Target 3—commonly interpreted as increasing protected area coverage to 30% by 2030. Reflecting on the submissions, recent developments, and our collective experience, we outline key considerations that could help guide future submissions and implementation strategies. We caution against cherry-picking specific targets, highlighting that an overemphasis on Target 3 will fail to achieve the overarching vision of living in harmony with nature. This requires a more holistic and inclusive approach to conservation and a focus on the full suite of GBF targets.

1 | Introduction

With the Kunming-Montreal Global Biodiversity Framework (GBF) finalized, countries were expected to submit their (revised) National Biodiversity Strategies and Action Plans (NBSAPs) before the United Nations Convention on Biological Diversity (UNCBD) Conference of Parties (COP) 16 took place in November 2024. Only 35 countries (less than 20%), along with the EU (which, in addition to member countries' submissions, submits their own region-wide commitment), have submitted their updated NBSAPs, leaving 160 (more than 80%) still to do so. Although the number of submissions is limited, the distribution is global with 2 from North America (Mexico, Canada), 6 from Latin

America and the Caribbean (Cuba, Curaçao, Suriname, French Guiana, Aruba, Colombia), 5 from Africa (Burkina Faso, Tunisia, Libya, Mauritania, Uganda), 12 from Europe (EU, Moldova, Malta, Austria, Norway, Ireland, Italy, France, Spain, Slovenia, Luxembourg, Hungary), 9 from Asia (Jordan, China, Palestine, Malaysia, South Korea, Japan, Indonesia, Afghanistan, UAE), and 2 from Oceania (Tonga, Australia).

Given that the success of international environmental agreements depends on political will and implementation plans, now is an opportune time to assess the submitted NBSAPs. We used the online UNCBD dashboard¹ (from where detailed information about GBF objectives, direct links to country submissions, and the

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Conservation Letters* published by Wiley Periodicals LLC.

online reporting tool can be accessed) and NBSAP tracking tools² to review country submissions to the UNCBD and consider the extent to which they align with the GBF. We were particularly interested in understanding if NBSAPs are congruent with the broad spectrum of GBF objectives (vision, mission, goals, and targets) or whether submissions coalesce around particular goals or targets, hypothesizing that there would be a tendency to cherry-pick more popular and easily achieved targets, which could undermine the pursuit of the UNCBD long-term ambition of “humanity living in harmony with nature.”

The adoption of the GBF by member states of the UNCBD in December 2022 marked a renewed commitment to address the biodiversity crisis. This new framework consists of four long-term goals and 23 associated interim targets and is intended to guide conservation efforts for the next 25 years. The framework displays an enhanced level of ambition compared to its predecessor, the Aichi 2020 targets, which we consider to be welcome and necessary, but the legacies of previous agreements highlight how such documents can represent little more than a bureaucratic change unless realized through effective implementation (Xu et al. 2021; Liu and Raftery 2021). Globally agreed targets, whether towards social or environmental ends, typically and necessarily have grand ambitions and often become associated with headline goals. However, recent experience suggests that global frameworks and their associated headline features may become more successful at raising awareness and attracting investment than at generating political will or ensuring that policy becomes practice. For example, the Aichi targets and the SDGs were extremely ambitious, yet none of the Aichi targets were achieved, and progress toward the SDGs is so far underwhelming, with climate and environmental goals performing notably poorly (Malekpour et al. 2023).

A key reason for the failure to achieve the Aichi targets was the failure of the parties to set appropriate national targets that adhere to the global framework (Xu et al. 2021). Beneath the headline goals, the GBF has a broad range of 23 targets that acknowledge the spectrum of drivers of environmental change and the concerted efforts required for system-level transformation (IPBES 2019). Significant effort was made to reduce the ambiguity and complexity that undermined the Aichi targets (Butchart et al. 2016), and GBF targets were encouraged to be designed around the SMART principles of specific, measurable, attainable, realistic, and time-bound (Hughes and Grumbine 2023). Despite these efforts, many targets retain vague language such as “significantly,” “substantially,” “increase,” “reduce,” and so forth. Furthermore, as is broadly acknowledged in conservation science, there are no silver bullet solutions, and countries face context-specific challenges requiring tailored solutions (Ostrom 2007). While the breadth of the GBF accounts for this, it also risks countries “cherry-picking” targets that are easier to achieve or more politically convenient, overlooking others that have the potential for more meaningful progress. Such a selective approach could result in a fragmented response, resulting in missed opportunities and even incurring perverse outcomes (e.g., trading off social justice for conservation).

We assessed the currently submitted NBSAPs and highlight here four key areas of concern that broadly relate to the GBF ambitions and country commitments:

1.1 | Most NBSAPs Do Not Include an Explicit Commitment to the Overarching Vision or Mission of the GBF

In pursuit of the overall vision of humanity living in harmony with nature, the interim mission of the GBF is to “halt and reverse biodiversity loss by 2030,” and the currently submitted NBSAPs offer insight into current trends in this direction. Only one country made a specific commitment to this mission; Australia pledged to halt and reverse biodiversity loss by 2030, while China pledged to effectively mitigate biodiversity loss within its territory by 2030 (but, like other countries, does not reference its impacts in other areas). The EU commits to reversing pollinator loss, which is, of course, notable, but a significantly lesser goal presumably driven by concerns about the supporting services to food production than biodiversity conservation per se. Italy, Austria, Luxembourg, and Ireland follow suit, emphasizing their commitments to reducing pollinator loss. Others simply acknowledge that halting biodiversity loss is a requirement but provide no mechanism or indicators to explain how this will be pursued or measured.

1.2 | The Current NBSAPs Suggest Countries Inadequately Consider the Broad Range of Targets

Specific targets on gender equality (Target 23 on gender equality in implementation) and consistent reference to Indigenous people’s rights are notable and welcome updates within the GBF. However, there is poor alignment between GBF text and NBSAPs content when it comes to issues related to Indigenous People and equity, with almost a third of submitted NBSAPs failing to make any reference to Indigenous issues at all (either within their territories or through financial support for nature-dependent people linked through commodity chains or global drivers such as climate change) (Table 1). Several countries from diverse geographies provide specific text, for example, “strengthening the role or capacity of Indigenous peoples,” but the language of strengthen, support, and so forth is vague and not SMART. Two notable exceptions are Mexico, which has several SMART targets, and Denmark, which committed 18 million DKK per year to the International Working Group for Indigenous Affairs.

Many countries (17/36) fail to make any specific, significant financing pledges (GBF Target 19), while others (13) make vague statements of intent, such as “ensure necessary financing” or “20 billion per year should be unlocked” (Table 1). Several countries commit to mobilizing additional financing, while Colombia significantly pledges to contribute 3% of its GDP by 2030—approximately \$105 million. Austria makes a specific commitment to increase biodiversity-relevant international development financing by 100%. While this is also significant given that in 2020–2021, Austria committed 37.6% of its total bilateral allocable aid (\$189.4 million) in support of the environment and the Rio Conventions (although only 7% was directly for biodiversity) (OECD), greater actions from developed nations will be needed to meet the targeted \$20 billion per year goal (by 2025). Clearly, an enhanced level of ambition and greater consistency across, particularly high-income, countries for the distribution of financial resources is required from the yet-to-be-submitted NBSAPs.

TABLE 1 | Submitted NBSAP alignment with selected GBF objectives. Vague and average typically indicate that NBSAPs refer to the objective but fail to make any specific, quantifiable commitment.

Country NBSAP	Commitment to halting biodiversity loss	Commitment to increasing area under protection	Commitment to financial contribution	Commitment to IPLCs
Afghanistan	No	Yes	No	Average
Aruba	Vague	Yes	No	Poor
Australia	Yes	Yes	No	Average
Austria	No	Yes	Vague	Poor
Burkina Faso	Vague	No	Yes	Poor
Canada	Vague	Yes	Vague	Good
China	Yes	Yes	No	Poor
Colombia	Vague	Yes	Yes	Average
Cuba	No	Yes	No	Average
Curaçao	Vague	Yes	No	Poor
Denmark	No	Yes	Yes	Good
European Union	No	Yes	Vague	Poor
France	Vague	Yes	Yes	Average
Hungary	No	No	No	Poor
Indonesia	No	Yes	Vague	Average
Ireland	No	Yes	No	Good
Italy	No	Yes	No	Poor
Japan	No	Yes	No	Average
Jordan	Vague	No	No	Average
Libya	Vague	Yes	No	Poor
Luxembourg	Yes	Yes	Vague	Poor
Malaysia	Vague	Yes	Yes	Average
Malta	Vague	Yes	Vague	Poor
Mauritania	No	Yes	No	Poor
Mexico	No	Yes	No	Good
Norway	No	Yes	Vague	Good
Palestine	Yes	Yes	Vague	Average
Republic of Korea	Yes	Yes	No	Average
Republic of Moldova	No	Yes	No	Poor
Slovenia	No	Yes	Vague	Poor
Spain	Vague	Yes	Vague	Poor
Suriname	No	Yes	Vague	Average
Tonga	Vague	Yes	Vague	Average
Tunisia	No	Yes	Yes	Poor
UAE	No	Yes	No	Poor
Uganda	Yes	Yes	Vague	Good

Source: <https://ort.cbd.int>, https://wwf.panda.org/act/nbsap_tracker_check_your_countrys_nature_progress/, <https://www.carbonbrief.org/cop16-tracking-country-pledges-on-tackling-biodiversity-loss/>.

1.3 | NBSAPs Overemphasize Target 3

Far greater consistency is found across country submissions towards Target 3, the well-known and widely circulating 30×30 commitment that requires countries to conserve 30% of land, water, and seas by 2030. A total of 33 of the 36 NBSAPs not only refer to but also commit to specific targets to place more areas of land or sea under protection. Of these, 23 committed to meeting, or even exceeding, the 30×30 target. However, there is evidence of selective approaches here, too, as most countries focus on the spatial component of Target 3 while overlooking the supporting guidance and indicators, including those highlighting the need for integrated and equitable application.

Target 3 is the GBF “stand out” target, which has received significant media and scientific attention and is seemingly generating political support as evidenced by countries’ willingness to include specific targets for it within their NBSAPs. This target aims to increase the global coverage of protected areas and other effective area-based conservation measures (OECMs) to at least 30% by 2030 (often referred to as 30×30). Its standout status is reflected in the opening statement of the CBD press release, which states, “By 2030: Protect 30% of Earth’s lands, oceans, coastal areas, and inland waters.” Headline goals are attractive because they offer a highly relatable and often simple target that generates broad interest and can help mobilize collective action and financing towards a common concern. As such, there was considerable enthusiasm for a headline goal for nature within the GBF, particularly due to the success in generating media and private sector attention for the headline goal of the Paris Agreement that is, limiting global warming to 1.5°C .

While the GBF always intended to have a broad set of targets and aims, the spatial component of Target 3 fulfills the criteria of being simple and relatable and can be easily communicated and assessed using the spatial coverage of protected areas and OECMs. However, the lack of information on many of the supporting components of Target 3 (i.e., recognition of Indigenous lands, ensuring sustainable use, and integrating measures into broader landscape concerns) and insufficient attention to other GBF targets in the 36 NBSAPs (Table 1) suggest that emphasis on the spatial dimension of Target 3 (30×30) is a distraction from the full ambition of Target 3 (integrated and equitable application), from the full suite of GBF Targets (inclusivity), and from the broader long-term mission of the GBF (harmony with nature). There is a further associated risk that a narrow interpretation of Target 3 as simply 30×30 could be used to justify a return to fortress conservation approaches.

While the Target 3 headline indicator is SMART, it fails to specify whether the area protected is important for biodiversity, if it is effective in reducing biodiversity loss, whether it addresses anthropogenic degradation, or if it contributes to connectivity (Pillay et al. 2024). Again, this ambiguity allows for potentially meaningful and contextualized strategies to be developed, but it also leaves the target open to interpretation. It is particularly risky if the target is interpreted as being a call for strict protection of land, which has long been associated with social injustices and has not always been as effective at conserving nature as proponents would like to believe. Moreover, the active separation of people and nature through “fortress” protectionist-

style approaches is clearly misaligned with, and will fail to achieve, the CBD mission of humanity living in harmony with nature and risks disrupting the connections of those people now maintaining the most proximate and tangible relationships with nature (Garnett et al. 2018; Sze et al. 2022). It could also hasten rural depopulation and undermine essential land stewardship (Marini et al. 2024).

There is no certainty that the protection of 30% of the planet will lead to a reduction in biodiversity loss, let alone generate social co-benefits (Geldmann et al. 2019). There are several reasons for this. First, it is clear that protected areas alone are not enough to halt biodiversity loss. Protecting 30% of the planet requires a near-doubling of current globally protected areas. Yet the world’s biodiversity has significantly decreased during the most recent doubling (between 1990 and 2020) of protected areas. While the losses may have been much greater without PA establishment, this shows that PAs alone are not sufficient to resolve biodiversity loss at the global scale and could fail to realize the system-level transformations required for harmonious human–nature relations (Díaz et al. 2019). Second, biodiversity conservation is not always effective within park boundaries (Geldmann et al. 2019), and many parks exist on paper only (Di Minin and Toivonen 2015). For example, poor regulation and low levels of protection mean that over 80% of EU marine-protected areas are ineffective (Aminian-Biquet et al. 2024). Third, the effectiveness and environmental and social outcomes are highly dependent on the kind of reserve being created—with reserves established in partnership with IPLCs faring much better than those excluding people (Dawson et al. 2021; Zhang et al. 2023). But the GBF itself and the NBSAPs are not explicit about the kinds of protected areas required, risking a return to the establishment of strictly protected areas, which have often been associated with a range of social harms, including the displacement and dispossession of local and Indigenous people along with loss of access to resources that are important for food security and livelihoods (Vasquez and Sunderland 2023; Benjaminsen and Bryceson 2012; Craigie et al. 2010; Curran et al. 2004; Pyhälä et al. 2016).

Misinterpreting Target 3 as a call for more strict protected areas risks falling into the trap of designing interventions based on formulaic prescriptions that are misaligned with the characteristics of the problem (Kalfagianni and Young 2022). Rather, efforts to extend PA coverage should consider the range of options and be supplemented with increased efforts to enhance the effectiveness and equity of existing PAs (Li et al. 2024). In doing so, the actions required to equitably reduce and reverse biodiversity loss have great potential for a range of co-benefits, ranging from enhanced justice to climate mitigation (Shin et al. 2022).

1.4 | Strategies and Implementation Need to be Inclusive

A primary reason for the failure to achieve global goals in the past has been the weak implementation at national and subnational levels (Cardona Santos et al. 2023; Xu et al. 2021). This is in part because the strategies are often externally designed, based on Western worldviews and technocratic approaches (Dawson et al. 2023), and fail to recognize local communities and their place-based knowledge and values (Carmenta et al.

2023; Milner-Gulland 2024). Countries and implementers should rather develop and commit to more long-term integrated systems approaches that better consider synergies (and trade-offs) across GBF targets and with broader objectives (climate, food security), ensuring that social justice dimensions are at the core (Milner-Gulland 2024). It is increasingly acknowledged that governance that includes or is led by Indigenous peoples and local communities can generate more effective conservation (Dawson et al. 2023; Sze et al. 2022). Such evidence strongly suggests that simply “recognizing and respecting the rights of indigenous peoples and local communities” (GBF) is insufficient but rather that implementation should ensure that local people codesign and lead conservation and restoration efforts.

2 | Conclusion

The issue we have highlighted concerning cherry-picking convenient targets extends to a potential failure to pursue a holistic approach to conservation. These tendencies are evident within the NBSAPs. For example, submitted NBSAPs clearly overlook—or intentionally exclude—certain targets, that is, those related to gender, finance, and Indigenous people. Yet, the pursuit of multilateral agreements is dependent upon national pledges, and national pledges demand subsequent (sub)national action to be impactful. Multilateral environmental agreements can be effective, but sadly, the Montreal Protocol of 1987—which was focused on a single issue—remains largely the exception to the rule (Whitesides 2020). More recently, the SDG framework has been criticized for legitimizing unsustainable models of development that deliver short-term socioeconomic advances at the cost of environmental integrity (Weitz et al. 2023). Implementation strategies for the GBF must avoid a situation whereby environmental protection and recovery exacerbate inequalities or further increase pressure on those already vulnerable and, in fact, often already deliver conservation aims while failing to address the wealth-related drivers of biodiversity decline (Lenzen et al. 2012), including the impacts of “developed” countries environmental footprints on distant regions (Dasgupta and Levin 2023).

A world where humanity lives in harmony with nature requires systemic transformations in the way much of humanity perceives our role in, with, or as nature (Mace 2014) and cannot be achieved by a narrow focus on Target 3. Instead, attention to social justice and multi-sectoral inclusion must underpin GBF implementation efforts to have any chance of humanity living in harmony with nature. Learning from those communities already doing so and amplifying the positive human-biodiversity dynamics that often emanate from biocultural centers is a logical starting point (Carmenta et al. 2023). Meanwhile, applying systems thinking and robust environmental governance principles can enable implementers to avoid siloed responses and inform the development of options for future ecologically and socially resilient landscapes that respond to both global environmental challenges and local realities. Finally, the strategic and inclusive thinking and designs that are required should not be constrained by short, unrealistic time horizons (i.e., 2030). Although the issues are urgent, some realism is required—it took a 4-year consultation process to agree on the 23 GBF targets; it is hardly conceivable that they will be achieved in the next 5 years, and

rushing them heightens the risks of ineffective, inefficient, or inherently damaging solutions.

Data Availability Statement

The authors have nothing to report.

Endnote

¹<https://ort.cbd.int/dashboard#0.4/0/0>

²https://www.panda.org/act/nbsap_tracker_check_your_countrys_nature_progress/; [https://www.carbonbrief.org/cop16-tracking-country-pledges-on-tackling-biodiversity-loss/#:%7E;text=NBSAPs%20are%20blueprints%20for%20how,legally%20required%20%E2%80%9393%20to%20submit%20NBSAPs.](https://www.carbonbrief.org/cop16-tracking-country-pledges-on-tackling-biodiversity-loss/#:%7E:text=NBSAPs%20are%20blueprints%20for%20how,legally%20required%20%E2%80%9393%20to%20submit%20NBSAPs.)

References

- Aminian-Biquet, J., J. Sletten, J. Claudet, J. Young, and B. Horta. 2024. “Over 80% of the European Union’s Marine Protected Area Only Marginally Regulates Human Activities.” *One Earth* 7: 1614–1629. <https://doi.org/10.1016/j.oneear.2024.07.010>.
- Benjaminsen, T. A., and I. Bryceson. 2012. “Conservation, Green/Blue Grabbing and Accumulation by Dispossession in Tanzania.” *Journal of Peasant Studies* 39, no. 2: 335–355. <https://doi.org/10.1080/03066150.2012.667405>.
- Butchart, S. H., M. Di Marco, and J. E. Watson. 2016. “Formulating Smart Commitments on Biodiversity: Lessons From the Aichi Targets.” *Conservation Letters* 9, no. 6: 457–468.
- Cardona Santos, E. M., F. Kinniburgh, S. Schmid, et al. 2023. “Mainstreaming Revisited: Experiences From Eight Countries on the Role of National Biodiversity Strategies in Practice.” *Earth System Governance* 16: 100177. <https://doi.org/10.1016/j.esg.2023.100177>.
- Carmenta, R., J. Barlow, M. G. Bastos Lima, et al. 2023. “Connected Conservation: Rethinking Conservation for a Telecoupled World.” *Biological Conservation* 282: 110047. <https://doi.org/10.1016/j.biocon.2023.110047>.
- Craigie, I. D., J. E. M. Baillie, A. Balmford, et al. 2010. “Large Mammal Population Declines in Africa’s Protected Areas.” *Biological Conservation* 143, no. 9: 2221–2228. <https://doi.org/10.1016/j.biocon.2010.06.007>.
- Curran, L. M., S. N. Trigg, A. K. McDonald, et al. 2004. “Lowland Forest Loss in Protected Areas of Indonesian Borneo.” *Science* 303, no. 5660: 1000–1003. <https://doi.org/10.1126/science.1091714>.
- Dasgupta, P., and S. Levin. 2023. “Economic Factors Underlying Biodiversity Loss.” *Philosophical Transactions of the Royal Society B* 378, no. 1881: 20220197. <https://doi.org/10.1098/rstb.2022.0197>.
- Dawson, N. M., A. Bharjwaj, B. Coolsaet, et al. 2023. “Towards More Equitable and Effective Nature Conservation Led by Indigenous Peoples and Local Communities.” *Policy Matters* 23: 13–31.
- Dawson, N. M., B. Coolsaet, E. Sterling, et al. 2021. “The Role of Indigenous Peoples and Local Communities in Effective and Equitable Conservation.” *Ecology and Society* 26, no. 3: 19. <https://doi.org/10.5751/ES-12625-260319>.
- Díaz, S., J. Settele, E. S. Brondízio, et al. 2019. “Pervasive Human-Driven Decline of Life on Earth Points to the Need for Transformative Change.” *Science* 366, no. 6471: eaax3100.
- Garnett, S. T., N. D. Burgess, J. E. Fa, et al. 2018. “A Spatial Overview of the Global Importance of Indigenous Lands for Conservation.” *Nature Sustainability* 1, no. 7: 369–374. <https://doi.org/10.1038/s41893-018-0100-6>.
- Geldmann, J., A. Manica, N. D. Burgess, L. Coad, and A. Balmford. 2019. “A Global-Level Assessment of the Effectiveness of Protected Areas at Resisting Anthropogenic Pressures.” *Proceedings of the National Academy*

- of Sciences of the United States of America 116, no. 46: 23209–23215. <https://doi.org/10.1073/pnas.1908221116>.
- Hughes, A. C., and R. E. Grumbine. 2023. “The Kunming-Montreal Global Biodiversity Framework: What It Does and Does Not Do, and How to Improve It.” *Frontiers in Environmental Science* 11: 1281536. <https://doi.org/10.3389/fenvs.2023.1281536>.
- IPBES. 2019. *Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services*. Zenedo. <https://zenodo.org/record/3553579#.YfmYTerMI2w>.
- Kalfagianni, A., and O. R. Young. 2022. “The Politics of Multilateral Environmental Agreements Lessons From 20 Years of INEA.” *International Environmental Agreements: Politics, Law and Economics* 22, no. 2: 245–262. <https://doi.org/10.1007/s10784-022-09567-6>.
- Lenzen, M., D. Moran, K. Kanemoto, B. Foran, L. Lobefaro, and A. Geschke. 2012. “International Trade Drives Biodiversity Threats in Developing Nations.” *Nature* 486, no. 7401: 109–112. <https://doi.org/10.1038/nature11145>.
- Li, G., C. Fang, J. E. M. Watson, W. Qi, Z. Wang, and J. Liu. 2024. “Mixed Effectiveness of Global Protected Areas in Resisting Habitat Loss.” *Nature Communications* 15: 8389. <https://doi.org/10.1038/s41467-024-52693-9>.
- Liu, P. R., and A. E. Raftery. 2021. “Country-Based Rate of Emissions Reductions Should Increase by 80% beyond Nationally Determined Contributions to Meet the 2°C Target.” *Communications Earth & Environment* 2, no. 1: 29. <https://doi.org/10.1038/s43247-021-00097-8>.
- Mace, G. 2014. “Whose Conservation?” *Science* 345, no. 6204: 1558–1560.
- Malekpour, S., C. Allen, A. Sagar, et al. 2023. “What Scientists Need to Do to Accelerate Progress on the SDGs.” *Nature* 621: 250–254.
- Marini, L., P. Batáry, R. Carmenta, et al. 2024. “Ecology and Conservation Under Ageing and Declining Human Populations.” *Journal of Applied Ecology* 61, no. 9: 1982–1988. <https://doi.org/10.1111/1365-2664.14758>.
- Milner-Gulland, E. J. 2024. “Now Is the Time for Conservationists to Stand up for Social Justice.” *PLoS Biology* 22, no. 6: e3002657. <https://doi.org/10.1371/journal.pbio.3002657>.
- Di Minin, E., and T. Toivonen. 2015. “Global Protected Areas Expansion: Creating More Than Paper Parks.” *Bioscience* 65, no. 7: 637–638.
- Ostrom, E. 2007. “A Diagnostic Approach for Going Beyond Panaceas.” *Proceedings of the National Academy of Sciences of the United States of America* 104, no. 39: 15181–15187.
- Pillay, R., J. E. M. Watson, S. J. Goetz, et al. 2024. “The Kunming-Montreal Global Biodiversity Framework Needs Headline Indicators That Can Actually Monitor Forest Integrity.” *Environmental Research: Ecology* 3: 043001.
- Pyhälä, A., O. Orozco, and S. Counsell. 2016. *Protected Areas in the Congo Basin: Failing both People and Biodiversity?* The Rainforest Foundation UK.
- Rico-Strafford, J., Z. Wang, and A. Pfaff. 2023. “Comparing Protection Types in the Peruvian Amazon: Multiple-Use Protected Areas Did No Worse for Forests.” *SSRN Electronic Journal*, ahead of print, August 14. <https://dx.doi.org/10.2139/ssrn.4540784>.
- Shin, Y. J., G. F. Midgley, E. R. M. Archer, et al. 2022. “Actions to Halt Biodiversity Loss Generally Benefit the Climate.” *Global Change Biology* 28, no. 9: 2846–2874. <https://doi.org/10.1111/gcb.16109>.
- Sze, J. S., L. R. Carrasco, D. Childs, and D. P. Edwards. 2022. “Reduced Deforestation and Degradation in Indigenous Lands Pan-Tropically.” *Nature Sustainability* 5, no. 2: 123–130. <https://doi.org/10.1038/s41893-021-00815-2>.
- Vasquez, W., and T. Sunderland. 2023. “The Rights Way Forward: Reconciling the Right to Food With Biodiversity Conservation.” *Oryx* 57: 370–378.
- Weitz, N., H. Carlsen, T. Bennich, M. Nilsson, and Å. Persson. 2023. “Returning to Core Principles to Advance the 2030 Agenda.” *Nature Sustainability* 6, no. 10: 1145–1148. <https://doi.org/10.1038/s41893-023-01212-7>.
- Whitesides, G. 2020. “Learning From Success: Lessons in Science and Diplomacy From the Montreal Protocol.” *Science & Diplomacy* 9, no. 2: 1–13.
- Xu, H., Y. Cao, D. Yu, et al. 2021. “Ensuring Effective Implementation of the Post-2020 Global Biodiversity Targets.” *Nature Ecology and Evolution* 5, no. 4: 411–418. <https://doi.org/10.1038/s41559-020-01375-y>.
- Zhang, Y., P. West, L. Thakholi, et al. 2023. “Governance and Conservation Effectiveness in Protected Areas and Indigenous and Locally Managed Areas.” *Annual Review of Environment and Resources* 48, no. 1: 559–588.