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# Inspiration from the Kunming-Montreal Global Biodiversity Framework for SDG 15

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## Abstract

With the United Nations' Agenda 2030, countries worldwide have committed to a set of Sustainable Development Goals (SDGs) to be achieved by 2030. Among them is SDG 15, known as Life on Land. What makes this SDG special is that several of its targets had been scheduled for completion by 2020- raising the question what should happen to these targets after 2020 as they have not yet been achieved. With the approaching 2023 SDG Summit in mind, this perspective paper examines how the Kunming-Montreal Global Biodiversity Framework, which was adopted under the Convention on Biological Diversity in late 2022, might provide guidance for the implementation of SDG 15 and maintain the momentum for action until 2030. Three areas are critical. First, concerning protected areas, the strengthened rights-based approach of the Kunming-Montreal Global Biodiversity Framework should be integrated into SDG 15. Second, the new framework promotes the sustainable use of biodiversity more clearly than SDG 15 and should hence guide transformation of the biodiversity-based economic sectors. Finally, the Kunming-Montreal Global Biodiversity Framework provides the first quantified financial target for global biodiversity action, and at the SDG Summit, that target should be reinforced by additional financial commitments. Guidance in these three areas can be integrated into the SDG Summit's Political Declaration and into the voluntary pledges that countries are expected to make at the Summit, and it can inform the review of the SDG indicators.

**Keywords** SDG 15 · SDG Summit · Kunming-Montreal Global Biodiversity Framework · Protected areas · Sustainable use of biodiversity · Biodiversity finance

## Abbreviations

- CBD Convention on Biological Diversity
- COP Conference of the Parties
- GBF Kunming-Montreal Global Biodiversity Framework
- IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
- IPLCs Indigenous peoples and local communities

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SDGsSustainable Development GoalsUNUnited Nations

## 1 Introduction: SDG 15 and the need for a new impetus to action

Halfway into the implementation of the United Nation's Agenda 2030 and its associated Sustainable Development Goals (SDGs), SDG 15, called Life on Land, is in a dire state. It remains far from fulfilling its mission to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" (UN, 2015). According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), species extinction rates are tens to a hundred times higher than the average rate over the past 10 million years and are still increasing. In most terrestrial biomes, the average abundance of native species has fallen by at least 20% since 1900, and the rate of loss is likely accelerating. In consequence, 23% of global terrestrial area already suffers from reduced productivity due to land degradation, and hundreds of billions of US dollars in annual crop output are at risk from pollinator loss (Diaz et al., 2019). In light of such scientific evidence, the most recent UN SDG Report warns of negative consequences for human livelihoods, including food and water security (UN, 2023a). In the run-up to the 2023 SDG Summit, additional momentum for realising SDG 15 is thus urgently needed, and I suggest that at least some of that momentum could come from recent developments under the Convention on Biological Diversity (CBD).

A distinctive feature of the biodiversity-related SDGs (14 — Life below Water — and 15 — Life on Land) is that they are grounded in earlier commitments from other international agreements and soft law instruments (Rantala et al., 2020; Underdal & Kim, 2017). Those include the CBD and its Aichi Targets – a set of 20 strategic targets for the 2011 –2020 decade (CBD, 2010). As a result, five of SDG 15's targets have a target date of 2020 instead of the 2030 target date for the SDGs overall. Among them are Target 15.1, which concerns the conservation and restore degraded forests. Both lean heavily on the Aichi Targets. Because COVID-19 prevented the CBD's 15th Conference of the Parties (COP) from meeting in 2020 in Kunming, China, as originally planned, the COP was not held until December 2022, in Montreal, Canada, delaying the adoption of a new strategic plan to replace the Aichi Targets in the decade up to 2030. The adoption of this new so-called Kunming-Montreal Global Biodiversity Framework (GBF), which set four goals for 2050 and 23 targets for 2030 (UN, 2022a), is expected to provide new guidance for SDG 15 (IUCN, 2022).

In this spirit, I argue that the SDG Summit's Political Declaration of Heads of State and Governments should include a firm commitment to implementing the GBF. More specifically, below, I identify three core areas in which the GBF surpasses the Aichi Targets and targets of SDG 15: a strengthened commitment to rights-based conservation, the sustainable use of biodiversity, and biodiversity finance. These areas should receive particular emphasis in a section on biodiversity in the Political Declaration, and countries should align their voluntary pledges at the Summit with these commitments. In the medium term, indicators for SDG 15 targets can be updated in line with the most recent developments under the CBD. At COP 15, parties to the CBD did not finalise the development of the GBF monitoring framework and mandated an expert group to further operationalise it for adoption at COP 16 in 2024 (UN, 2022b). This monitoring framework should then inform the next comprehensive review of the Inter-Agency Expert Group on SDG Indicators in 2025 (UN, 2023b), allowing for an

update of SDG 15 indicators in line with the GBF. There should be no insurmountable obstacles to the international community's unified commitment to the GBF at the SDG Summit and beyond: Apart from the Holy See, the USA is the sole non-party to the CBD, but the Biden Administration has already embraced key principles of the GBF (WWF, 2022).

#### 2 Strengthening rights-based conservation

The long-term mainstay of biodiversity conservation has been protected areas (Corson et al., 2014; Geldmann et al., 2013). While protection requirements vary in stringency for different categories of protected areas, their common objective is to conserve nature by limiting human interference (Dudley, 2008). Across the developing world, historical experience shows that strictly protected areas in particular are frequently associated with displacement, marginalisation and human rights violations of indigenous peoples and local communities (IPLCs). IPLCs often live in or around the most biologically intact areas and suffer directly when access to lands and resources is restricted, which not only undermines their material livelihoods but also disrupts their cultural and traditional affiliations with the areas and impedes their self-determination (Brockington et al., 2015; Colchester, 2004; Dowie, 2011). Evidence consistently shows that in contrast to the assumptions behind such restrictions, IPLC stewardship is highly effective in sustaining biodiversity, and communities tend to benefit more when they are involved in protected-area governance (Gurney et al., 2023).

The coverage of protected areas is one of the indicators SDG 15 includes for assessing the conservation of terrestrial and freshwater ecosystems by 2020 (15.1.2). However, it makes no provision for protecting IPLC rights and it fails to specifically mention the need to include IPLCs in the management of biodiversity and ecosystem services. This significant omission allows that policies for protected areas could be implemented in the name of SDG 15 without sufficient attention to lives and livelihoods (Krauss, 2022). In its in-depth review of SDG 15, the High-Level Political Forum on Sustainable Development itself identified tenure rights and the inclusion of IPLCs as key areas needing improvement and stated that more qualitative indicators are required for assessing the management of protected areas (UN, 2018).

During the past two decades, a rights-based approach to the establishment and management of protected areas has slowly but steadily taken root under the CBD. Protection of IPLCs' livelihoods, cultures, and right to participate in decisions about the establishment and management of protected areas has gradually been expanded. However, parties to the CBD have previously hesitated to grant full legal protection to IPLCs' land and tenure rights (Lehmann, 2020). Against this background, key IPLC representatives (IIFB, 2022) have praised the Kunming-Montreal GBF's new protected areas target, which aspires to expand protected area coverage to 30% of global land area by 2030, because it also recognises indigenous and traditional territories (Target 3). IPLCs have also celebrated the inclusion of a new target, which reaffirms their rights "over lands, territories, resources, and traditional knowledge" in all decision-making related to biodiversity (Target 22). At the 2023 SDG Summit, this enhanced rights-based approach should also inform all voluntary pledges that countries may make for additional investments in protected areas. Going forward, updated SDG 15 indicators should include respect for IPLC land and resource rights to guide countries' future SDG reporting.

# 3 Transformative action for sustainable use

Protected areas can fulfil an important function in safeguarding key biodiversity areas (Diaz et al., 2019). However, their dominant role in conservation strategies has increasingly come under fire for addressing only the symptoms of biodiversity loss while ignoring its causes (Karlsson-Vinkhuyzen et al., 2018). After all, the key drivers of biodiversity loss are the biological resource-based production sectors. The greatest negative impact on terrestrial biodiversity comes from changes in land use, and agricultural expansion is its primary driver, affecting forests, wetlands and grasslands. The second most important driver of terrestrial biodiversity loss is the direct exploitation of nature, primarily through harvesting, logging and hunting (Diaz et al., 2019). In its landmark 2019 Global Assessment, IPBES emphasised that biodiversity can be conserved, restored, and used sustainably only with transformative change across economic, social, political, and technological factors (Diaz et al., 2019).

The Agenda 2030's ambition is that the SDGs will be a transformative force. However, the targets and indicators of the environmental SDGs, including SDG 15, do not evince a transformative vision recognising the need for economic practices to respect planetary boundaries (Krauss, 2022; Krauss et al., 2022). Notably, SDG 15's targets and indicators ignore the structural-economic drivers of biodiversity loss and the special need for developed countries to respect biophysical limits (Krauss, 2022). SDG 15's sustainable-use-related targets (15.1 and 15.2) and respective indicators make only a generic call for sustainable use of terrestrial and inland freshwater ecosystems by 2020, focusing specifically on forest management. The need to aim higher was reiterated within the SDG system itself when the 2022 Global Sustainability Report (UN, 2022c) sought urgent action to reverse net habitat loss, transform land management, and transition to sustainable agriculture.

The GBF includes a few more specific requirements that can be integrated into SDG 15. The CBD has long almost neglected the issue of sustainable use of biological resources (Lehmann, 2020), and even the GBF addresses it in vague terms. The GBF's long-term goal for 2050 is to utilise nature's contributions to people sustainably while maintaining and enhancing ecosystems' functions and services (Goal B). Its targets for 2030 include the reduction of pollution risks, which includes halving the excess nutrients lost to the environment and reducing the overall risks from pesticides (Target 7). Another target calls for the sustainable management of agriculture and forestry, particularly through the sustainable use of biodiversity, and for the first time in its history, the CBD explicitly mentions biodiversity-friendly practices, such as agroecology (Target 10). Nevertheless, that same target also mentions highly contested "innovative" practices, such as sustainable intensification. Because the latter practice focuses on intensifying agriculture while failing to clarify what its label of sustainability does and does not allow, it is suspected of allowing corporate greenwashing and seeking to maintain the status quo (Mahon et al., 2017). Despite such shortcomings, however, the GBF devotes more attention to sustainable use and provides more concrete guidance about it than the text of SDG 15. Countries making pledges at the SDG Summit should heed this impetus for sustainable use and specify concrete reforms to the domestic economic sectors that principally drive their biodiversity loss and degradation. Sector-specific sustainable use indicators should also be integrated during the process of SDG indicator alignment.

## 4 Upscale biodiversity finance

Finally, a key factor in achieving the goals of both SDG 15 and the GBF will be the provision of sufficient financial resources. The expense of establishing and maintaining protected areas is an obvious example of conservation costs. Yet the sustainable management and restoration of various types of ecosystems also create significant costs. The estimates of recent studies point to a global biodiversity finance gap of approximately US\$ 700 billion per year (Deutz et al., 2020).

The SDGs do not have a dedicated financing framework, and a recent overview study found little evidence for a significant reallocation of government funds for SDG implementation, either domestically or through international cooperation (Biermann et al., 2022). Thus, it is unsurprising that the Financing for Sustainable Development Report 2023 points to a growing gap between SDG financing needs and actual development finance, also calling on the international community to take immediate steps to "scale up development cooperation and SDG investments" (UN, 2023c).

With the adoption of the GBF, parties to the CBD have agreed on "progressively closing the biodiversity finance gap of \$700 billion per year" by 2050 (Goal D) and mobilising US\$ 200 billion annually by 2030 (Target 19). This includes an agreement to transfer "at least US\$ 30 billion per year by 2030" in international biodiversity aid from developed to developing countries. This agreement marks the international community's first publicly acknowledged biodiversity funding targets for which countries can be held accountable. Still, citing 2050 as the target year for closing the funding gap means that valuable time for stopping biodiversity decline is being lost. Moreover, developing countries have criticised the figure of US\$ 30 billion in international biodiversity transfers annually as far too low (Abulu & Ghosh, 2022). These arguments resonate powerfully given that the GBF expects developing countries, which face the highest risk of habitat loss, to shoulder a greater conservation burden, despite bearing less responsibility for global biodiversity loss, which is largely driven by resource exports to developed countries (Diaz et al., 2019).

Achieving the 2030 biodiversity targets will require the swift allocation and transfer of necessary funds. With the Montreal COP past, countries convening at the SDG Summit in September 2023 –particularly developed countries – should use the opportunity to launch concrete new funding initiatives for biodiversity. This would send a clear signal that though the funding commitments they entered in Montreal were low, they plan to follow through.

#### 5 Conclusion: action for 2030 and beyond

In the early morning hours of 19 December 2022, when the Chinese environmental minister gavelled CBD COP 15 to a close (Abulu & Ghosh, 2022), the four-year process of negotiating the GBF came to an end. This new strategic framework clearly does not meet all expectations for a strong decadal action plan. It is too vague and lacks robust financial commitments to guide a transformative change in our overuse of biological resources. Still, it does include many improvements over both the Aichi Targets and SDG 15's targets and the indicators modelled on them. Therefore, governments convening at the SDG Summit in September 2023 should take advantage of the momentum that was created in Montreal, carrying it forward and integrating it into SDG 15. Otherwise, what is potentially the most significant opportunity for action on SDG 15's targets will be lost.

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# Declarations

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# References

- Abulu, L. & Ghosh, S. (2022). Nations adopt Kunming-Montreal Global Biodiversity Framework. Mongabay. Retrieved 10 April 2023 from: https://news.mongabay.com/2022/12/nations-adopt-kunmi ng-montreal-global-biodiversity-framework/
- Biermann, F., Hickmann, T., Senit, C.-A. & Grob, L. (2022). The Sustainable Development Goals as a transformative force? Key insights. In Biermann, F., Hickmann, T. & Senit, C.-A. (Eds.) *The political impact of the Sustainable Development Goals. Transforming governance through global goals?* (pp. 204–226). Cambridge University Press.
- Brockington, D., & Wilkie, D. (2015). Protected areas and poverty. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 370(1681), 20140271. https://doi.org/10.1098/rstb.2014.0271
- CBD. (2010). The strategic plan for biodiversity 2011 –2020 and the Aichi Biodiversity Targets. Retrieved 10 April 2023 from https://www.cbd.int/decisions/.
- Colchester, M. (2004). Conservation policy and indigenous peoples. *Environmental Science & Policy*, 7, 145-153.
- Corson, C., Gruby, R., Witter, R., Hagerman, S., Suarez, D., Greenberg, S., Gray, N., Bourque, M., & Campbell, L. (2014). Everyone's solution? Defining and redefining protected areas at the Convention on Biological Diversity. *Conservation and Society*, 12(2), 190–202.
- Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., & Tobin de la Puente, J. (2020). *Financing Nature: Closing the global biodiversity financing gap.* The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability. Retrieved 8 May 2023 from https://www.paulsoninstitute.org/conservation/finan cing-nature-report/.
- Díaz, S., J. Settele, E.S. Brondízio, H.T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K.A. Brauman, S.H.M. Butchart, K.M.A. Chan, L.A. Garibaldi, K. Ichii, J. Liu, S.M. Subramanian, G.F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y.J. Shin, I.J. Visseren-Hamakers, K.J. Willis and C.N. Zayas (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. IPBES. Retrieved 10 April 2023 from https://ipbes.net/global-assessment.
- Dowie, M. (2011). Conservation refugees: The hundred-year conflict between global conservation and native peoples. MIT Press.

- Dudley, N. (2008). Guidelines for Applying Protected Area Management Categories. International Union for Conservation of Nature. IUCN. Retrieved 8 May 2023 from https://portals.iucn.org/library/sites/ library/files/documents/pag-021.pdf.
- Geldmann, J., Barnes, M., Coad, L., Craigie, I., Hockings, M., & Burgess, N. (2013). Effectiveness of terrestrial protected areas in reducing habitat loss and population declines. *Biological Conservation*, 161, 230–238.
- Gurney, G., Adams, V., Alvarez-Romero, J., & Claudet, J. (2023). Area-based conservation: Taking stock and looking ahead. One Earth, 6, 98–104.
- IIFB. (2022). Indigenous peoples and local communities celebrate COP 15 deal on nature, and welcome the opportunity of working together with states to implement the framework, press release. International Indigenous Forum on Biodiversity. Retrieved 6 May, 2023 from https://iifb-indigenous.org/2022/12/ 19/indigenous-peoples-and-local-communities-celebrate-cop15-deal-on-nature-and-welcome-theopportunity-of-working-together-with-states-to-implement-the-framework/.
- IUCN. (2022). Enabling a post-2020 Global Biodiversity Framework fit for purpose. Perspectives and reflections for the Fifteenth Conference of the Parties, Montreal, Canada, December 2022. IUCN. Retrieved 8 May 2023 from https://iucn.org/sites/default/files/2022-11/for-a-global-biodiversity-frame work-fit-for-purpose-perspectives-dec-2022\_0.pdf.
- Karlsson Vinkhuyzen, S., Boelee, E., Cools, J., van Hoof, L., Hospes, O., Kok, M., Peerlings, J., van Tatenhove, J., Termeer, C., & Visseren-Hamakers, I. (2018). Identifying barriers and levers of biodiversity mainstreaming in four cases of transnational governance of land and water. *Environmental Science and Policy*, 85, 132–140.
- Krauss, J. (2022). Unpacking SDG 15, its targets and indicators: Tracing ideas of conservation. *Globaliza*tions, 19(8), 1179-€"1194.
- Krauss, J., Jimenez-Cisneros, A., & Requena-i-Mora, M. (2022). Mapping sustainable development goals 8, 9, 12, 13 and 15 through a decolonial lens: Falling short of 'transforming our world.' *Sustainability Science*, 17, 1855–1872.
- Lehmann, I. (2020). Conservation Justice and the Convention on Biological Diversity: Bridging Philosophy and Empirical Analysis. Staats- und Universitätsbibliothek Bremen.
- Mahon, N., Crute, I., Simmons, E., & Islam, M. M. (2017). Sustainable Intensification "Oxymoron" or "Third Way"? A Systematic Review. *Ecological Indicators*, 74, 73–97.
- Rantala, S., Iacobuta, G., Minestrini, S., & Tribukait, J. (2020). Gaps and Opportunities for Synergies in International Environmental Law on Climate and Biodiversity to Promote the Sustainable Development Goal. In T. Honkonen & S. Romppanen (Eds.), 2019 International Environmental Law-Making and Diplomacy Review (pp. 58-99). University of Eastern Finland.
- UN. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. Retrieved 10, April 2023, from https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf? OpenElement.
- UN (2018). 2018 HLPF Background Note-Review of progress towards achieving SDG 15. Retrieved 9, April 2023, from sustainabledevelopment.un.org/hlpf/2018
- UN. (2022a). Decision adopted by the Conference of the Parties to the Convention on Biological Diversity. 15/4. Kunning-Montreal Global Biodiversity Framework. Retrieved 6, May 2023 from https://www. cbd.int/decisions/.
- UN. (2022b). Decision adopted by the Conference of the Parties to the Convention on Biological Diversity. 15/5. Monitoring framework for the Kunning-Montreal Global Biodiversity Framework. Retrieved 6, May 2023 from https://www.cbd.int/decisions/.
- UN. (2022c). The Sustainable Development Goals Report 2022c. Retrieved 6, May 2023 from https://unsta ts.un.org/sdgs/report/2022c/.
- UN. (2023a). Progress towards the Sustainable Development Goals. Towards a rescue plan for people and the planet. Retrieved 6, May 2023 from: https://hlpf.un.org/sites/default/files/2023a-04/SDG%20Pro gress%20Report%20Special%20Edition\_1.pdf
- UN. (2023b). SDG Indicators. Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. Retrieved 5, May 2023, from https://unstats.un. org/sdgs/indicators/list/.
- UN. (2023c). Financing for sustainable development report. Retrieved 10, April 2023, from development-finance.un.org.
- Underdal, A., & Kim, R. (2017). The Sustainable Development Goals and Multilateral Agreements. In N. Kanie & F. Biermann (Eds.), *Governing Through Goals: Sustainable Development Goals As Governance Innovation* (pp. 241-258). MIT Press.

WWF. (2022). Global deal struck to reverse nature loss by 2030, but immediate action and funds needed to deliver. Retrieved 6, May 2023 from https://www.worldwildlife.org/press-releases/global-deal-struckto-reverse-nature-loss-by-2030-but-immediate-action-and-funds-needed-to-deliver.

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