Commentary

The Kunming-Montreal Global Biodiversity Framework: Business as usual or a turning point?

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The post-2020 global biodiversity framework and its 23 targets potentially mark a turning point for sustainable and ethical biodiversity conservation, but work must be done in the implementation period if actions are to benefit the many rather than the privileged few.

The Kunming-Montreal Global Biodiversity Framework (GBF)¹ was adopted during the 15th Conference of Parties (COP15) of the UN Convention on Biological Diversity (CBD) at 3:30 a.m. on the morning of December 19, 2022, against a backdrop of protests by African countries. This mirrored the fractious context of conservation over the last century and recent decades, and the 3.5 years of negotiation of the GBF leading up to COP15. With four goals and 23 targets, the framework sets out the next eight years of actions to 2030, a major stepping stone toward the convention's vision of "living in harmony with nature" by 2050. The question now is whether implementation will repeat the experience of the Aichi Targets from 2010 to 2020, of which none were fully met, or whether this marks a turning point in international policy in overcoming the north-south divides to halt and reverse biodiversity loss and achieve sustainability for all.

What happened during COP15?

The current state of biodiversity is declining alarmingly; commonly cited statistics include a 68% decline in the abundance of vertebrate species since 1970, with one million species presently at risk of extinction. A growing body of evidence is showing that it is not just species that are declining but that the actual life support systems upon which the planet depends are increasingly at risk.

Our species, one of perhaps 10 million on the planet and just one of the 70,000 species of vertebrates, has gone through an exponential phase of population growth, reaching 8 billion today and is expected to peak with an additional 15%–40% more individuals in the coming decades. We have appropriated an enormous and disproportionate amount of global biodiversity: 50% of land surface is so changed by us it is no longer recognizable as "natural,"² about 25% of the net primary productivity of terrestrial vegetation is appropriated by us,³ we (37%) and our mammalian food (59%) account for 96% of global mammalian biomass,⁴ and chickens account for 71% of avian biomass.⁴

Economic growth and material accumulation are rising even faster than population growth and 74% of the total excess material use (i.e., resource use in excess of fair shares) is appropriated by just 16% of the global population, mostly living in high-income countries.⁵ Evidence now indicates the level of individual material consumption is the most impactful factor driving humanity's footprint on the planet,⁵ more than total global population, as has been the mantra until now.⁶ This differential defines the dichotomy between the principal protagonists within the biodiversity convention: the Global South, where most of the intact and high-diversity biodiversity remains and thus where the burden of proposed conservation actions is concentrated, and the Global North, whose consumption has driven global biodiversity decline to date.

Scientific inputs into CBD processes have traditionally focused on species and protected areas. However, increasing attention is being paid to social, economic, and cultural aspects and the services biodiversity provides.^{2,7} Although understanding of limits to growth and global sustainability first arose in the 1970s, we now have a much greater understanding of planetary limits, reinforced by transgression of some.⁸ We also now can increasingly reliably allocate responsibility for these transgressions,^{5,9} with enormous ethical implications. The challenge of biodiversity loss is no longer simply a case of protecting species or ecosystems, it is now a matter of remaining within (or returning to) "safe" planetary limits in a just and equitable manner.^{8,10}

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At the start of the GBF negotiations, traditional biodiversity targets were the focus, with "apex" targets being proposed on reducing species extinction and increasing area-based protection. Subsequently, the discourse shifted through calls from the research community for more integrated attention to all major components of biodiversity^{11,12} and a focus on outcomes through concepts such as "bending the curve" on biodiversity loss and "nature-positive" futures.^{13,14} A final effort focused on the need to fully address drivers of decline and equity¹⁵ stimulated an online campaign that gained signatures from 3,000 scientists in the week preceding adoption of the GBF.¹⁶

At the COP, the two main negotiating camps held to prior positions. The Global North and conservation actors (including some businesses) campaigned to halt the loss of biodiversity globally but without accountability for historic and current trends and without full commitments to close the funding gap for proposed actions. The Global South and social actors were concerned for their rights to development and self-determination and not reassured that sufficient funding would be available to support committed actions and make them effective. If anything, divisions were deepened, amplified by the novel challenges and two-year delay





imposed by the COVID-19 pandemic. Tensions bubbled repeatedly to the surface even to the final adoption of the GBF, with a protest by the Democratic Republic of the Congo and other African countries over inadequate finance commitments that was initially ignored by the COP president and had to be addressed in emergency meetings before the end of the COP.

Nevertheless, a framework text was adopted with specific targets due in 2030 and goals by 2050.¹ The challenge has been passed to the implementation phase to determine if the GBF marks a turning point in overcoming the northsouth divides to halt and reverse biodiversity loss. Reflecting the need identified for "transformative change" to meet global goals,² three areas are highlighted below for such change. Opportunities to advance these were missed at the COP and need to be nurtured, starting immediately during implementation.

Addressing causes of biodiversity decline

The GBF targets are spread across all aspects of the sustainable development paradigm-in layers corresponding to environment, economy, society, and means of implementation (Figure 1)and address drivers of biodiversity loss in varied ways. Targets 3-8 focus on the five key drivers of biodiversity decline as defined by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES, i.e., land/sea-use change, exploitation, invasive alien species, pollution, and climate change).² Another set of targets seek to address economic drivers of decline (described above), whether directly through reducing impacts of production and consumption (targets 10, 15, 16) or through policies and incentives (targets 14, 18).

Acknowledging the highly differentiated economic status of countries, and thus their roles in driving biodiversity decline, is essential to implement the economic driver targets effectively. The concept of "loss and damage" adopted last year in the United Nations Framework Convention on Climate Change (UNFCCC) is also relevant here. The loss and damage concept acknowledges that impacts related to climate change are directly attributable to historical actions and actors, allowing apportioning of responsibility to compensate for impacts today essentially, the "polluter pays" principle. Adopting that principle "closes the loop" on accountability; by making actors liable for future reparation, it incentivizes minimizing these costs through investing much earlier in both mitigation (to minimize exposure) and adaptation (to reduce sensitivity and vulnerability to climate exposure).

The same can be applied to biodiversity, i.e., linking minimizing losses, supporting adaptation, and supporting compensation and repair (restoration): new work during GBF implementation will be required to identify the impacts of lost biodiversity (e.g., absent species, illfunctioning ecosystems, poor provisioning of services) and these costs must then be factored into financial mechanisms to support these three components. Here, the focus is on the first step in the causal chain-transforming the indirect economic drivers of biodiversity loss (i.e., minimizing losses)-but attention must also be paid to enhancing adaptation (both of biodiversity and of people) and restoration and rehabilitation in response to both acute and chronic losses. Importantly, many biodiversity losses (particularly of services to people) may be reversible through the regenerative capacities of biological systems, providing powerful levers and options for investment in restoration (i.e., GBF target 2) and valid nature-based solutions. In addition, the time scales for such beneficial results may in some cases be relatively short (e.g., 5-15 years for ecological functions), which is of critical importance for the people whose consent and engagement is vital as well as for staging and ratcheting actions, objectives, and ambition over time.

Financing the GBF

Insufficient finance was a primary factor in the failure to achieve the Aichi Targets in 2020. Three financial quantities are incorporated into the GBF targets: US \$700 billion to be raised annually by 2030 (target 19) (compared to \approx US \$130 billion in 2019¹⁷), US \$500 billion of which should be derived from ending subsidies harmful to biodiversity by 2030 (target 18) (none achieved by 2020, though addressed by Aichi target 3); and overseas development assistance (ODA) from Global North to Global South countries

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should reach US \$20 billion by 2025 and US \$30 billion by 2030 (target 19a) (US 4-10 billion in 2019¹⁷).

Debate over these numbers persisted throughout the GBF negotiation, reflecting the constant tensions over international aid between providers (many of whom fail to meet the target of 0.7% of national income set internationally) and recipients (many of whose current underdeveloped states are a direct consequence of centuries of rule and exploitation by the very countries now providing assistance and dictating terms and access). Many Global South countries have been indebted or beholden to former colonizers for aid ever since international finance principles were developed by the Bretton Woods global financial institutions following the Second World War. At the same time, patterns of growth and consumption in the Global North (and East, see below) have continued to extract and degrade resources (including biodiversity) from the South without investing in the natural asset management we now recognize as necessary for sustainability. With economic growth rising through the Great Acceleration¹⁸ up to today, this trade model has delivered the safety and justice planetary crises we now face.8,10

The emerging evidence base has established the reciprocal perspective, that funding needed to halt and reverse biodiversity decline can be calibrated against historically (and contemporaneously) appropriated wealth that was not spent or re-invested appropriately.^{5,10} The current biodiversity debt is the physical measure of what was extracted and not managed sustainably, and we increasingly have the tools to quantify and allocate responsibility for this. In the GBF, investing in restoration (target 2) and in sustainable production (targets 10, 15) can be directly accounted as repair and asset management. These, mainstreaming biodiversity in current policies (targets 1, 14), changing consumption patterns (target 16), and removing and ideally repurposing harmful subsidies (target 18) all have a role in applying financial and economic resources and levers at the right places for economic actors to internalize costs previously "externalized" (i.e., not paid) in the capitalist system. Direct financial transfers (target 19) address reframing ODA and may include novel financial

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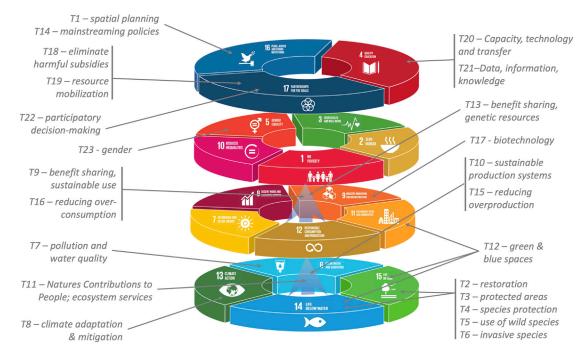


Figure 1. The twenty three targets of the Kunming-Montreal Global Biodiversity Framework are spread across most domains across the sustainable development goals

These include conservation actions that address direct drivers of biodiversity loss (bottom layer, "nature") and actions that address indirect drivers of biodiversity loss, including on economic goals (second layer, "economy"), social goals (third layer, "society"), and the means to achieve success (top layer, "means of implementation").

instruments such as appropriately designed "green" and "blue" bonds.

Importantly, this paradigm shift of finance toward sustainability principles (i.e., away from growth and extractivism) would accompany a long overdue shift in power relations, not only within the CBD but more widely in the global multilateral system. It would shift the power dynamic between payer and recipient of finance to an ethical and equitable one where the recipient has appropriate control and agency as the custodian of the planetary asset or commons and provider of the service; a shift that is highly desirable for Global South countries but has been continually resisted by the Global North in the multilateral arena.

For and by whom

While multiple values and cultures have long been acknowledged, it is only now that the global community is approaching true aspirations and potential mechanisms of equity.¹⁹ In the biodiversity space, this is particularly critical for Indigenous people and local communities (IPLCs), as up to 80% of the planet's remaining intact biodiversity is reportedly on their territories. largely thanks to their traditions and cultures. But their role has not only gone unrecognized but been actively undermined by both (and as) users and protectors of biodiversity historically. While this is changing, the roles of IPLCs in biodiversity conservation and sustainable use need to shift much further, beyond tokenism. A sign of this need is the insistence by IPLCs and many Global South countries for references to IPLCs and equity in as many GBF targets as possible, ballooning the text rather than retaining concise targets and trusting that the general principles in paragraphs 8 and 9 will be respected across all actions. Importantly, this is the case not just for customary and traditional rights holders (i.e., the IP in IPLC) but also human rights holders, i.e., everyone, including the "invisible billions" in lowbiodiversity, transformed, and degraded land- and seascapes (i.e., the full scope of LCs) where functioning biodiversity at local scales is essential to support economies and well-being.²⁰

In the coming years, the global community needs to transform and fully adopt equity principles. Although the planet's biodiversity would fare better without 8-11 billion humans on the planet, it would also be in a much healthier state were it not for the past 500-600 years of extraction and capital accumulation by imperialist-colonial-capitalist economies. Past damage and future threats must be addressed deeply and together. Achieving peak human population will likely occur within the next 100 years. Transforming from capitalist to sustainable, circular, non-growth economies could happen in decades with political will. The onus is on those with greatest responsibility and agency in the more rapid-response and ethical option to transform-and that means the wealthy in the Global North and emerging economies transforming to circular sustainable economies first, while supporting and accelerating just transitions that shield the vulnerable from risks, predominantly in the Global South.9,10,15

In this, fully incorporating rights in implementation of the GBF is just one of the many international instruments for which this must be done, all aligned through the sustainable development goals (SDGs).



Conclusion

Far from being a radical take on the Kunming-Montreal Global Biodiversity Framework, all the elements stated here are contained within its text and the principles established in paragraphs 7-23. The challenge posed here is therefore appropriate for the coming implementation period: will the global community move forward with a business-as-usual implementation by focusing on just nominal implementation of favored conservation-focused targets such as "30 by 30" (i.e., raising protected area coverage to 30% of all land and sea areas by 2030) but failing to invest enough to assure quality and effectiveness and reduction of drivers that will prevent success? Or does the potential for transformation within the GBF mark a real turning point? And not just in biodiversity action, since to be successful the transformations must be embedded across all other domains of the SDGs, such as in the UNFCCC's Paris Agreement (Figure 1).

Global North and Global South countries, and the actors that accompany them, will have significant transformations to make and will need to transcend historical differences to deliver the shared vision of the future already crafted. There are, however, important outliers to this north-south dichotomy: China provides an increasingly dominant "East" pole, though with comparable consequences of its extractivist/growth model to the Global North; some countries are already in transition across the divide, with potential for political transformation such as in Brazil's new government in 2023; and the exciting transformational possibilities of "well-being economies" in countries as divergent as Bhutan and Finland, among others. Any of these may potentially define new (nature-positive and people-positive¹⁵) pathways for both Global South and North countries to gravitate toward.

The foundations for success are in the GBF. The question is now whether in implementation countries and leading actors will remain within their comfort zones or take the great leap forward.

DECLARATION OF INTERESTS

The author is a member of the Earth Commission.

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