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PERSPECTIVE



The CBD Post-2020 biodiversity framework: People's place within the rest of nature

Kim Friedman^{1,2} | Peter Bridgewater^{3,4,5} | Vera Agostini¹ | Tundi Agardy⁶ | Salvatore Arico⁷ | Frank Biermann⁵ | Kate Brown⁸ | Ian D. Cresswell⁹ | Erle C. Ellis¹⁰ | Pierre Failler¹¹ | Rakhyun E. Kim⁵ | Christelle Pratt¹² | Jake Rice¹³ | Vivienne Solis Rivera¹⁴ | Lida Teneva¹⁵

¹Food and Agriculture Organization of the United Nations (FAO), Rome, Italy; ²The University of Western Australia Oceans Institute, Crawley, Western Australia, Australia; ³Institute for Applied Ecology University of Canberra, Canberra, Australian Capital Territory, Australia; ⁴Centre for Heritage and Museum Studies, The Australian National University, Canberra, Australian Capital Territory, Australia; 5Utrecht University, Utrecht, The Netherlands; 6Sound Seas, Colrain, Massachusetts, USA; ⁷Ex UNESCO-IOC, Paris, France; ⁸GLISPA: Global Island Partnership, Papamoa, New Zealand; ⁹University of New South Wales, Sydney, New South Wales, Australia; 10 University of Maryland, Baltimore County, Maryland, USA; 11 University of Portsmouth, Portsmouth, UK; 12 Organisation of African, Caribbean and Pacific States, Brussels, Belgium; 13Ex Fisheries and Oceans Canada, Ottawa, Ontario, Canada; 14CoopeSoliDar R.L., San Jose, Costa Rica and ¹⁵World Wildlife Fund, Washington, District of Columbia, USA

Correspondence

Peter Bridgewater

Email: peter.bridgewater@canberra.edu.au

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Abstract

- 1. Recognizing two decades of failure to achieve global goals and targets, parties to the Convention on Biological Diversity are in the final phase of negotiating a Post-2020 Global Biodiversity Framework for the conservation, sustainable use and benefit sharing of biodiversity. The framework attempts to set out pathways, goals and targets for the next decade to achieve positive biodiversity change.
- 2. This perspective intends to help that framework set people firmly as part of nature, not apart from it. Despite work done so far through four meetings, new thinking and focus is still needed on 'what' changes must be conceptualized and implemented, and 'how' those changes are to be delivered. To help achieve that new thinking, as a broad range of people, many with a focus on aquatic systems, we highlight six key foci that offer potential to strengthen delivery of the framework and break the 'business as usual' logjam.
- 3. These foci are as follows: (i) a reframing of the narrative of 'people's relationship with the rest of nature' and emphasize the crucial role of Indigenous Peoples and Local Communities in delivering positive biodiversity change; (ii) moving beyond a focus on species and places by prioritizing ecosystem function and resilience; (iii) supporting a diversity of top-down and bottom-up governance processes; (iv) embracing new technologies to make and measure progress; (v) linking business more effectively with biodiversity and (vi) leveraging the power of international agencies and programmes.

[Corrections added on 15 October 2022, after first online publication: The affiliation for the author "Erle C. Ellis" has been changed from "University of Maryland, College Park, Maryland, USA" to "University of Maryland, Baltimore County, Maryland, USA"].

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4. Given they are linked to a greater or lesser degree, implementing these six foci together will lead to a much-needed broadening of the framework, especially those of business and broader urban civil society, as well as those of Indigenous Peoples and Local Communities.

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KEYWORD

aquatic foods; biodiversity; convention on biological diversity; fisheries; nature; Post-2020 Global Biodiversity Framework,

1 | INTRODUCTION

Parties to the Convention on Biological Diversity (hereinafter 'the convention') have held workshops, consultations and formal negotiations (CBD, 2018) to develop a 'Post-2020 Global Biodiversity Framework' (hereinafter 'the framework'). The framework establishes goals and targets for positive biodiversity change up to 2030, *en route* to achieving the Convention on Biological Diversity's vision of 'Living in harmony with nature' by 2050. Since 2019, the convention has held four formal Open-Ended Working Group negotiations that have resulted in little progress. Further negotiations are planned prior to the upcoming Conference of Parties to the convention (December 2022), with a 3-day meeting to advance the framework scheduled immediately beforehand. The hope is that the framework will catalyse the transformative change which the two previous sets of goals and targets failed to deliver in 2010 and 2020.

To achieve the 2050 vision, parties need to deliver further on, and better link, the convention's three objectives: (i) conserve biological diversity, (ii) use biodiversity components sustainably and (iii) ensure a fair and equitable sharing of the benefits from genetic resources. This last has been a primary concern of the Global South since ratification, especially for Indigenous Peoples and Local Communities. Furthermore, in its present form, the framework lacks the requisite, explicit links between biodiversity, food, water, health, climate, energy and commerce for both positive biodiversity change and improved human well-being. As the convention's Executive Secretary, Elizabeth M. Mrema, recently stated: 'the world needs more joined-up action for biodiversity' (Contestabile, 2021). This sentiment echoes the concerns voiced by former Executive Secretaries since the convention came into force nearly 30 years ago.

The development of the framework takes place in a context where national and intergovernmental organizations increasingly acknowledge the need for transformative change in people's relationship with the rest of nature (IPBES, 2019, 2022a, 2022b). Although there is wide recognition that the nexus of biodiversity, food, water, health, climate and energy is crucial to development (Agardy, 2018; Cramer et al., 2017; Ellis et al., 2010; Ellis & Ramankutty, 2008; IPBES, 2021), sustainable global food systems—including aquatic foods from marine, coastal and freshwaters—remain a fundamental 'grand challenge' (FAO, 2020a; Gephart et al., 2021). In the last decade, major funding agencies have also

sought better understanding of this nexus through research and action (e.g. a call on the biodiversity and ecosystem services nexus by EU and the European Biodiversity Partnership, BiodivERs, 2021; EU, 2021a). While the remit of the convention does not extend to the high seas, parallel negotiations designed to remedy that weakness and develop an international legally binding instrument on marine biodiversity in areas beyond national jurisdiction are also in limbo: the fifth session was suspended on 28 August 2022, until a date to be decided.

Despite the best efforts of the Millennium Development Goals and the Sustainable Development Goals (SDGs) that replaced them-to improve human well-being, around 10% of the global human population remains hungry and in poverty, and nature continues to decline (IPBES, 2019). The framework, as its title suggests, is concerned with biodiversity-and yet documentation associated with it also uses the term 'nature'. While there are many definitions of nature, in this perspective, we follow Kenter and O'Connor (2022) who see nature as: 'conceived in many ways, ranging from abstract philosophical concepts to technical language of appraisal and policymaking, to everyday descriptions of the world around us'. For the avoidance of doubt, we use the term nature where others have, but preferentially use the term biodiversity. Continuing societal progress in an ever more populous world means simultaneously improving people's lives through increasing uses of nature (IRP, 2019) while paradoxically decoupling the intensity of those uses from awareness of their impacts. A broad framework that truly encompasses productive, sustainable and resilient social-environmental systems is central both to implementing the convention, its fellow biodiversityrelated conventions, and delivering the 2030 Agenda for Sustainable Development and its 17 goals. In other words, the framework must embrace people as part of the rest of nature in its very formulation.

With the above in mind, and to stimulate the new thinking urgently needed for effective progress, we, as a broad range of people (many with a focus on aquatic systems) identify six areas of concern (foci) and associated actions. We hope these ideas will help parties shape a workable and effective final form of the framework for adoption at the 15th Conference of the Parties to the convention in December 2022—as well as contributing to the vigorous ongoing global debates on the future for nature. We present the foci point by point, while recognizing there are many cross-links and feedbacks between them.

2 | SIX FOCI AND ACTIONS TO RESHAPE THE FRAMEWORK

2.1 | Reframe the narrative of people's relationship to the rest of nature

2.1.1 | Issue

The perception of a separation between people and nature, which sets up a scenario of duality is reflected in the latest draft of the framework (CBD, 2022). The *Local Biodiversity Outlook 2* (CBD, 2020a) commented on the need to overcome such dualism, and for the framework to achieve this its narrative must reinforce that people are part of, not apart from, the rest of nature.

Artificially separating nature and culture has been discussed as an underlying cause of biodiversity loss (e.g. Bridgewater & Rotherham, 2019; Fletcher et al., 2021; Kenter & O'Connor, 2022). Viewing material interaction between people and the rest of nature as simply contributing to biodiversity loss is neither helpful nor accurate. Yet, in the draft framework, people are either characterized as a threat to biodiversity, the damaging impact of which must be limited (Reducing threats for biodiversity), or as passive recipients, whereby people are merely asset users or beneficiaries of biodiversity (Nature's contributions to people). Characterizing people as 'breakers' or 'takers' ignores a third and important ongoing action, in which people's interaction with biodiversity, and its use thereof, simultaneously conserves and maintains biodiversity as part of human well-being (in other words, stewardship). Many millennia in the making, this reciprocally beneficial relationship between people and the rest of biodiversity (biocultural diversity) is most evident among Indigenous Peoples and Local Communities; yet to achieve global resilience it needs to be promulgated more widely and supported into the future through the framework (Bridgewater et al., 2007; Ellis et al., 2021; Nat Sustain, 2021; Reyes-García et al., 2022).

The framework's current approach to protected areas is a critical point where the challenges presented by dualism are evident. The current protected area debate does not reflect the evolving paradigm whereby 'nature for itself' is largely shifting to 'people and nature' (IPBES, 2022b; Mace, 2014). As protected areas on land and in the ocean transition from fortress conservation models to models of greater inclusion, the framework must emphasize the sound stewardship of all land and seascapes. In particular, the framework must support the contributions of Indigenous People and Local Communities, who reportedly steward 25% of the earth's land surface (IPBES, 2019; Reyes-García et al., 2022). Such an emphasis will also enable the consideration of biocultural diversity, a diversity well described by the convention itself (Bridgewater & Rotherham, 2019).

Nature will not end if we stop defining it by the absence of people (Nature, 2008). Between 76% and 96% of the planet's nature is found in shared or intensively used places. Emphasizing the conservation of biodiversity through keeping spaces as 'wilderness'

and devoid of people can be problematic (Ellis et al., 2021; Fletcher et al., 2021; Obura et al., 2021). Expanding protected areas by reducing anthropogenic local stressors is possible; however, this must proceed in collaboration with local communities who have aligned conservation, use and benefit sharing interests (Ostrom, 1999). The G7 leaders (EU, 2021b; UK, 2021) and the Kunming declaration (CBD, 2021a) have advocated a 30 by 30 target-that is, 30% of the earth's land and water under protection by 2030. However, the recent Kigali Call to Action for People and Nature from the African Protected Areas Congress highlights very real concerns from Indigenous Peoples and Local Communities who are affected by the development of protected areas in their lands and waters (Africa Protected and Conserved Areas Congress, 2022). Consequently, the framework should also promote actions that move beyond dialogue centred on excluding people. One model is the community conserved area promulgated by the International Consortium of Community Conserved Areas (ICCA Consortium, 2021), offering a clear path to achieve greater levels of biodiversity conservation within a rightsbased approach, which also recognizes responsibilities.

Given that the framework's interest is biodiversity conservation, and that most biodiversity is currently found *outside* of protected areas (see Ellis et al., 2021; Garibaldi et al., 2021), people-nature interactions that emphasize conservation and sustainable use in tandem should be more central. Win-win examples of the 'possibilities for conservation outside of protected areas and restoring degraded land to benefit farmers and biodiversity alike' are increasingly being reported, for example, Wurm et al. (2022). So, for the framework to be effective, while convention parties strive to increase the coverage of protected areas, they must simultaneously prioritize effort across productive landscapes to build on existing synergies between people and the rest of nature.

2.1.2 | Actions needed

Reframe the Post-2020 Framework's 'Theory of Change' to more formally recognize that sustainable use of biodiversity is not possible without considering conservation of biodiversity everywhere, as conservation is inherently a part of a broader canvas of sustainable use.

It is crucial that differing worldviews on the relationship between people, land, water and biodiversity are accommodated within the framework (Boyd & Keene, 2021). This also requires the traditional foods, diets, medicines of Indigenous Peoples and Local Communities to be seen as part of nature. Such a shift in recognizing people's place in the rest of nature also implies a re-evaluation of historical baselines, and what is considered 'natural'. Conservation goals in areas directly shaped by people are also 'natural' and need not be less ambitious than those in areas where they are absent (see biomes to anthromes, Martin et al., 2014). Studies indicate that under appropriate conditions, most native taxa may be sustainable within anthromes while increasing productivity in support of human populations (Ellis et al., 2021).

2.2 | Prioritize ecosystem function and resilience

2.2.1 | Issue

There is a growing interest in encouraging and enabling people to manage biodiversity in ways that are appropriate to retaining ecosystem function. Effective ecosystem function will allow for the delivery of ecosystem services/nature's contributions to people, in a range of settings from protected areas to urban environments (see reciprocity, Ojeda et al., 2022). This thinking inevitably requires a change from efforts to save threatened species from extinction, to efforts seeking to ensure ecosystem resilience.

Several internationally agreed approaches that prioritize an understanding of ecosystem function and resilience are in place, such as the convention's 'Ecosystem Approach' (CBD, 2004), FAO's 'Ecosystem Approach to Fisheries and Aquaculture' (FAO, 2010; Staples & Funge-Smith, 2009) and others (UNFCCC, 2011). The Convention's Kunming declaration refers to ecosystem-based approaches but is silent on the long-existing convention's Ecosystem Approach, while leaving the novel concept of 'Ecological Civilization' largely unexplained.

There is increasing recognition that distant pressures result in widespread impacts on ecosystem function and resilience, through the coupling of seemingly separate activities and their impacts. These pressures include international trade, migration, foreign investment, flows of ecosystem services and species invasions (Hull & Lui, 2018). Conversely, with local action, well-functioning ecosystems in one location can have far-reaching benefits for people elsewhere (Drakou et al., 2017).

2.2.2 | Action needed

Renewed focus on ecosystems in the framework, including existing tools to help guide the implementation of convention objectives and manage positive biodiversity change at the ecosystem level. More holistic approaches are needed to overlay strategies on 'saving' spaces or 'halting' extinction of individual species in a context of ensuring ecosystem function. This can be achieved by adopting and improving approaches that prioritize 'ecosystem function and resilience' to approaches that recognize links across value chains. Global fisheries leaders (Decision 17c in COFI 34 report; see FAO, 2020b) have already made a direct request for a reinvigoration of existing 'ecosystem approach' frameworks in the design and implementation of the framework. This approach is slowly gaining traction in current drafts of the framework (CBD, 2022). The promulgation of ecosystem approaches can help change people's strategies, and such approaches must themselves expand to establish clear links with, and include knowledge of, all sectors. This includes weaving indigenous and local knowledge with other knowledges (see Tengö et al., 2017) while recognizing global shifts to more connected communities, trade and markets. Yet, the draft framework inadequately addresses the reversal of negative biodiversity change caused by the

actions of a broad range of sectors: instead, it settles on a small subset of approaches to deliver conservation of species and spaces. The Declaration for Sustainable Fisheries and Aquaculture by FAO is more expansive in its vision, calling for 100% management (FAO, 2021) while Indigenous Peoples and Local Communities call for 100% sustainable use of their lands and territories (CBD, 2019).

2.3 | Support a diversity of top-down and bottomup governance processes

2.3.1 | Issue

At its core, the process of delivering change in the way we manage nature happens primarily through ongoing work and innovation by local actors. This approach offers solutions on a case-by-case basis, which are respectful of local bio-cultural contexts and implemented with the free prior informed consent of all actors (Frankel, 1952). However, case-by-case solutions often require resources and leveraging that can only come from larger scales of governance, and local initiatives often require integration and/or coordination at broader governance scales to be effective (Garcia et al., 2014). To support a diversity of governance processes, we must encourage local biodiversity champions to speak to their experience and suggest solutions (Sénit & Biermann, 2021), and to coordinate effectively with top-down governance processes.

Time-scales are also important: change is controlled by both intrinsic ecosystem factors and people's activities. For example, in marine systems, biodiversity change can be rapid, but recovery can be slow, taking decades or longer. For any new governance system to effect positive change, a better understanding of the drivers of change and the incorporation of that understanding into policy and regulations takes time (Biermann, 2020; Phang et al., 2020; Rice, 2011). In many cases, a combination of bottom-up and top-down actions (Agardy, 2005; Pattberg et al., 2019), coupled with multiple step-changes in management approaches rather than single large interventions, helps accelerate the reversal of negative biodiversity change (e.g. Reason, 2000).

The current draft of the framework misses this dynamic by focusing predominantly on global signals in the status and trends of biodiversity. This disconnect between what is happening locally and what can be measured globally must be overcome. The framework should not solely focus on measuring and delivering global indicators of change, but must measure, guide and support adaptive progress by local actors at local scales and share information on that progress at larger scales. For example, satellite remote sensing can reinforce signals from local on-the-ground activity.

2.3.2 | Actions needed

Decision-making and management through polycentric governance systems must be explicit in the framework. However, most urgently,

both civil society and intergovernmental organizations must be enabled to participate in refining the framework, both from its foundation AND in its implementation and adaptation over the decade. Much greater focus is needed in the framework on describing *what* needs to be achieved, while allowing civil society and business to work with governments to define *how* achievement can be effected. Soundly constructed national biodiversity strategies and action plans allow parties to document their work towards this achievement (but see critique by Whitehorn et al., 2019).

The convention has always suffered from an 'implementation gap', one which can only be filled by collective actions from parties. In long need of 'joined up' efforts, the convention has been intensively discussing-but rarely implementing-the 'mainstreaming' of biodiversity since its thirteenth meeting (Whitehorn et al., 2019). To achieve mainstreaming, greater inter-ministerial collaboration has been encouraged by global decisions taken at each Conference of the Parties to the convention (Contestabile, 2021). Parties therefore need to catalyse much stronger actions for sectoral integration. Such integration is needed as biodiversity conservation, use and benefit sharing must be dynamic, linked and adaptive at all scales (Archer et al., 2021; Failler et al., 2020), including through the provision of appropriate resources. While national plans for biodiversity conservation typically have indicators and review mechanisms for local and national scales, a more regular international review mechanism will encourage parties to discover what is and what is not working (cf. the Paris Agreement 5-year process model). Such a review mechanism would ensure parties' focus is concentrated on implementation and achievement by learning through doing and sharing. This would need ongoing support from the convention secretariat over the decade, along with that of other competent international authorities.

2.4 | Make and measure progress by embracing new technologies

2.4.1 | Issue

Investments in innovation deliver novel opportunities in how people appreciate biodiversity, from a deeper understanding of phylogeny and species relationships to the detection and tracking of ecosystem change using remote sensing (big data revolution, see Kitchin, 2014). When well designed and with proper input from stakeholders, innovations of all types broaden our ability to monitor and analyse human and societal change. When considering our place in nature and reporting on the state of nature through time, we need to be wary of not investing in novelty for novelty's sake. This is especially true for marine and coastal biodiversity, where ecological understanding lags behind that of land, and where the necessity to steward biodiversity is less understood by decision-makers and civil society. Innovation in the collection and delivery of information is badly needed to increase awareness.

Given the rapid developments in genetic technologies (such as e-DNA), machine learning and deep learning (Kwok, 2019), the

existing knowledge of change in social–ecological systems, gleaned from current assessment processes, will increasingly be supported by genetic and information technology and artificial intelligence. An illustrative example from the last decade is the evolving transition from traditional visual census of species and populations to more remote image capture and analysis, a development that requires the creation of new capacity, data streams and baselines.

2.4.2 | Action needed

Design performance tracking in the framework to allow for the adaptation of indicators, including the adoption of novel indicators during the life of the framework through technology transfer, which can support the global extension of local innovations. Harnessing advances in technology to utilize new indicators allow innovations in recording positive biodiversity change and will facilitate adaptive management. Greater capacity development and technological transfer will be needed to consolidate, communicate and extend local actions globally (Pendleton et al., 2019). Moreover, this will reinforce governance processes described under Focus 3, providing more effective and relevant real-time information on biodiversity change.

2.5 | Link business and biodiversity more effectively

2.5.1 | Issue

Recent reviews examining market effects on societies and the planet (Dasgupta, 2021; TEEB, 2010) have reached similar overarching conclusions: 'Our economies, livelihoods and well-being all depend on our most precious asset: Nature', and '[t]he solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it'.

Mischaracterizing the risk of use and trade of nature has inadvertently resulted in biodiversity losses from productive land and seascapes (Challender et al., 2021; Lim et al., 2016). Basil van Havre, Co-Chair for the convention's Open-Ended Working Group for the framework recognized this, stating that: 'we need all sectors' positive contributions, and it's important to incentivize international trade's positives for nature' (CBD, 2021b). The failure of the convention's two previous decadal initiatives to meet many of its goals has often been blamed on an inability to mobilize funding commensurate to ambition (see Ogwal, 2021). CBD (2020b) estimates financing the framework requires an annual investment of between USD 151 and USD 895 billion. Without a strong plan or fund being promoted to reach that goal, additional mechanisms are urgently needed, including actions to reverse perverse incentives. Yet, a focus on partnerships with the private sector and philanthropy remain inadequate, despite ample opportunities for strengthening such alliances. Business is increasingly willing, if not

obliged, to invest in sustaining social-environmental systems (impact investment/governance) and ensure shareholders face lower risk (risk governance) from biodiversity use (CFA, 2015; McElwee et al., 2020).

The concept of biodiversity as natural capital, allied with the concept of ecosystem services, is energizing the private sector (particularly in the Blue Economy, food industry and even fashion) to transition to more sustainable practices that reduce damage to biodiversity. There is something of a cultural clash between the concepts of natural capital, ecosystem services and nature's contributions to people and 'living well with nature' that links back to Focus 1. This clash needs to be acknowledged and discussed by convention parties during the life of the framework.

Financial institutions, insurance companies and businesses that depend on ecosystem services (including natural resources and a steady supply of raw materials) are moving towards better corporate governance that includes environmental and social issues (Turnhout et al., 2021). This is also reflected in the two most recent World Economic Forum Global Risks Reports (WEF, 2021, 2022). Examples include banks moving preferences in bond creation, and loan instruments, towards investments that meet environmental, social and governance criteria, and the insurance industry tackling the tangible risks from negative climate and biodiversity changes through portfolio diversification (Swiss Re, 2021; WEF, 2021).

There are benefits for both biodiversity and businesses (nature and people) in capturing new blue and green market opportunities that lead towards positive rather than negative biodiversity change (Finance for Biodiversity, 2021). Together, governments, the private sector and civil society (including conservation NGOs and Indigenous Peoples and Local Communities) can develop a virtuous cycle for positive biodiversity change. This demands positive feedback between sustainable use, benefit sharing and conservation of biodiversity (UNCTAD, 2018) while moving away from incentives harmful to nature.

2.5.2 | Actions needed

Organize the narrative of the framework to ensure that alongside governmental action it seeks to adequately engage private sector and civil society actors that use or otherwise have a stake in nature to have greater inclusion in the funding and delivery of the framework. The funding shortfall of the last decadal convention framework was estimated at 66%-88% (Xu et al., 2021), highlighting the urgent need to engage a wider range of sectors for resource mobilization to cover anticipated funding shortfalls for the framework's implementation. Pledges to disinvest in activity that damages nature, and by philanthropists to help restore and conserve nature (USD 5 billion, see Guardian, 2021) both offer an impressive start for new resource mobilization. Nevertheless, many pledges remain focused on protected areas rather than biodiversity in urban and working rural landscapes, which also reflects the funding focus of the Global Environment Facility since its inception. In addition to taking a more holistic perspective-including intrinsic and relational, as well as

instrumental values of nature—banks and the wider financial sector need to be incentivized to expand their role in stimulating a 'green evolution'. This could be secured through encouraging convention parties to create biodiversity-related accreditation schemes for their businesses and private citizens, as well as pathways for donations, taxes, etc., so that they reach biodiversity-focused fund(s). The indirect promotion of schemes that require shifts in business practices to waste less and recycle more is needed, as is promoting the uptake of in-kind activities, although measuring progress in the latter remains challenging.

2.6 | Leveraging the power of collaborating international agencies and frameworks to support local actors

2.6.1 | Issue

Dasgupta (2021) noted that the destruction of nature is 'not simply a market failure: it is a broader institutional failure too'. Throughout their existence, the convention and other biodiversity-related agreements have struggled to adequately engage broader civil society. This is a major concern, one magnified if the framework is seen as a product related only to the convention rather than an instrument for the international system and broader society. The tasks of the framework cannot be delivered by the convention alone, it requires a broad coalition of all biodiversity-related agreements and programmes to deliver on shared objectives. In 2010, an agreement to harmonize agreements around the convention's strategic plan (CBD, 2010) was a step in the right direction, yet it suffered from slow implementation and an overprotective outlook by (most notably) secretariats and parties to individual agreements.

Alongside the biodiversity-related agreements, the two other 'Rio conventions' (United Nations Framework Convention on Climate Change and the United Nations Convention on Combatting Desertification), and the Global Environment Facility, are vital to the plan's success. But even this expansive coalition will need new ways to engage broader civil society. Novel synergies are required with organizations and communities that are custodians of, use or profit from biodiversity; these include Indigenous Peoples and Local Communities living on community conserved areas, regional and international fishery bodies, and national farming organizations—all of which work with biodiversity-related agreements. This requires a strengthening of current arrangements and synergies. For example, in the ocean, the convention's 'Sustainable Ocean Initiative' (https://www.cbd.int/soi/) seeks to link environment and fishery-focused regional organizations to deliver benefits by 2030 through cross-sectoral cooperation.

2.6.2 | Actions needed

Use the framework process to strengthen synergies that leverage the power of international agencies and international frameworks

to build larger communities of practice – additional capacity and financial resources to achieve the convention 2050 vision for 'the future we want'. To leverage this power, the convention must align the framework with the SDGs, decadal initiatives of other Rio Conventions, those of the UN (especially the Decade of Ecosystem Restoration) and other multilateral instruments. Furthermore, many global and regional assessments remain uncoordinated in their actions, resulting in unnecessary duplication where resources are already limited, and creating additional work for those at the national level who must implement such actions. Consolidating the assessment work among the Intergovernmental Platform on Biodiversity and Ecosystem Services, the Intergovernmental Panel on Climate Change and other biodiversity-related agreements is essential to avoid duplication, sharpen focus, leverage the power of a diverse set of stakeholders and save considerably on resources.

The framework must leverage implementation through links to multiple agreements, enabling access to a much greater array of actors. For example, the UN Decade on Ecosystem Restoration offers an inclusive and positive vision that can encourage the participation of a full range of actors. In the case of fisheries, the convention can strengthen its links to FAO's COFI (http://www.fao.org/about/meetings/cofi/en/), notably by engaging in the actions outlined in the 'Declaration for Sustainable Fisheries and Aquaculture' (FAO, 2021), which provides opportunities for collective action, including by engaging and leveraging the efforts of broader civil society.

3 | CONCLUSION

Negative trends, especially biodiversity loss, are capturing the attention of civil society, national and global policymakers, and are increasingly linked to climate change and other existential global challenges (Anderson et al., 2021). This has resulted in a scramble to establish targets to prevent further degradation and recover past losses. However, targets alone will not necessarily stimulate action, as evidenced by the slow ramp-up of action on climate (Dasgupta, 2021; Stern Review, 2006), the delivery of pandemic preparedness (Independent Panel for Pandemic Preparedness and Response, 2021), and the result of two decades of lacklustre delivery on the convention's aspirations.

Moving the framework beyond a 'business as usual' approach requires a greater focus on biodiversity as part of tightly coupled socioecological systems. The solutions presented here for a change from 'business as usual' are relevant across most socioecological systems, as they promote a closer alignment of goals for people and the rest of nature.

The next 10 years are critical for mobilizing change to secure 'the [nature] future we want'. When talking about climate change, Holdren (2007) recognized three choices: 'mitigation, adaptation and suffering'. The same holds true for biodiversity change. Moreover, given the nexus of biodiversity, climate and human well-being, we must reject the last option, allowing people to adapt where necessary and thrive where possible, into the future. This is where the

active implementation of new solutions such as those outlined above play a crucial role. These solutions are predicated on our ability to break down silos and communicate a more unified message. COP15 and the implementation of a proactive framework must be a success—business as usual is no longer an option.

AUTHOR CONTRIBUTIONS

Kim Friedman and Peter Bridgewater conceived the idea for this perspective, wrote an initial draft and edited the final manuscript. All authors contributed to discussion on the draft and editing of the final draft

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CONFLICT OF INTEREST

None of the authors report any conflict of interest with respect to this perspective. Peter Bridgewater and Erle C. Ellis are Associate Editors for *People and Nature* but were not involved in the peer review and decision-making process.

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ORCID

Kim Friedman https://orcid.org/0000-0002-4002-6585

Peter Bridgewater https://orcid.org/0000-0001-7972-5386

Erle C. Ellis https://orcid.org/0000-0002-2006-3362

REFERENCES

Africa Protected and Conserved Areas Congress. (2022). Kigali call to action for People and Nature. Africa Protected and conserved areas congress 18–23 July 2022. https://www.awf.org/sites/default/files/2022-07/APAC KigaliCallToAction 230722.pdf

Agardy, T. (2005). Global marine policy versus site-level conservation: The mismatch of scales and its implications. *Marine Ecology Progress Series*, 300, 242–248. http://www.int-res.com/articles/meps_oa/m300p241.pdf

Agardy, T. (2018). The five-node resource nexus at sea. Chapter 27. In R. Bleischwitz, H. Hoff, C. Spataru, E. van der Voet, & S. D. VanDeer (Eds.), Routledge handbook of the resource nexus (pp. 406–423). Routledge. https://doi.org/10.4324/9781315560625

Anderson, S. C., Elsen, P. R., Hughes, B. B., Tonietto, R. K., Bletz, M. C., Gill, D. A., Holgerson, M. A., Kuebbing, S. E., McDonough MacKenzie, C., Meek, M. H., & Veríssimo, D. (2021). Trends in ecology and conservation over eight decades. Frontiers in Ecology and the Environment, 19(5), 274–282. https://doi.org/10.1002/fee.2320

Archer, E., Dziba, L. E., Mulongoy, K. J., Maoela, M. A., Walters, M., Biggs, R., Cormier Salem, M.-C., De Clerck, F., Diaw, M. C., Dunham, A. E., Failler, P., Gordon, C., Harhash, K. A., Kasisi, R., Kizito, F., Nyingi,

W. D., Oguge, N., Osman Elasha, B., Stringer, L. C., ... Sitas, N. (2021). Biodiversity and ecosystem services on the African continent – What is changing, and what are our options? *Journal of Environmental Development*, *37*, Art 100558, pp. 1–9. https://doi.org/10.1016/j.envdev.2020.100558

- Biermann, F. (2020). The future of 'environmental' policy in the Anthropocene: Time for a paradigm shift. *Environmental Politics*, 30(1-2), 61-80, https://doi.org/10.1080/09644016.2020.1846958
- BiodivERs A. (2021). Joint BiodivERsA-Belmont forum call on scenarios of biodiversity and ecosystem services. https://www.biodiversa.org/1400
- Boyd, D. R., & Keene, S. (2021). Human rights-based approaches to conserving biodiversity: Equitable, effective and imperative. Policy brief from the UN special rapporteur on human rights and the environment. 36 p. https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/policy-briefing-1.pdf
- Bridgewater, P., Arico, S., & Scott, J. (2007). Biological diversity and cultural diversity The heritage of nature and culture through the looking glass of multilateral agreements. *International Journal of Heritage Studies*, 13(4–5), 405–419. https://doi.org/10.1080/13527 250701351130
- Bridgewater, P., & Rotherham, D. (2019). A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation. https://doi.org/10.1002/pan3.10040
- CBD. (2004). CBD ecosystem approach. The convention on biological diversity COP 7 decision VII/11. 25 p. https://www.cbd.int/doc/decisions/cop-07/cop-07-dec-11-en.pdf
- CBD. (2010). Agreement to harmonize other instruments around the CBD strategy. First high-level retreat among secretariats of biodiversity related conventions, 5 p. https://www.cbd.int/cooperation/doc/report-hlr-2010-09-01-en.pdf
- CBD. (2018). Comprehensive and participatory process for the preparation of the post-2020 global biodiversity framework. CBD/COP/DEC/14/34, 9. https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-34-en.pdf
- CBD. (2019). Report of the global thematic dialogue for Indigenous Peoples and Local Communities on the post-2020 global biodiversity framework, Montreal, Canada, 17-18 November 2019. CBD/POST2020/WS/2019/12/2. https://www.cbd.int/doc/c/245c/aee3/33cabfb2c1daa9c539b3c5ed/post2020-ws-2019-12-02-en.pdf
- CBD. (2020a). Local biodiversity outlook 2. Companion Publication to Global Biodiversity Outlook. https://www.cbd.int/gbo/gbo5/publication/lbo-2-en.pdf
- CBD. (2020b). Estimation of resources needed for implementing the Post-2020 global biodiversity framework. Preliminary second report of the panel of experts on resource mobilization (CBD/SBI/3/5/Add.2 8 June 2020). Convention on Biological Diversity. https://www.cbd.int/doc/c/d20d/1c03/c7b991efc0196788baa3 1539/sbi-03-inf-05-en.pdf
- CBD. (2021a). Kunming declaration. https://www.cbd.int/doc/c/99c8/9426/1537e277fa5f846e9245a706/kunmingdeclaration-en.pdf
- CBD. (2021b). The post-2020 Global Biodiversity Framework and the role of business. YouTube video, added by Convention on Biological Diversity [Online]. https://www.youtube.com/watch?v=f0cbq r2wSWM.
- CBD. (2022). Current version of the post 2020 global biodiversity framework. https://www.cbd.int/doc/c/079d/0d26/91af171843b6d4e 9bee25086/wg2020-04-I-02-annex-en.pdf
- CFA. (2015). Environmental, social, and governance issues in investing: A guide for investment professionals. 52 p. ISBN: 978-1-942713-21-0. https://www.cfainstitute.org/-/media/documents/article/posit ion-paper/esg-issues-in-investing-a-guide-for-investment-profe ssionals.ashxp
- Challender, D. W. S., Brockington, D., Hinsley, A., Hoffmann, M., Kolby, J. E., Massé, F., Natusch, D. J. D., Oldfield, T. E. E., Outhwaite, W.,

- Sas-Rolfes, M., & Milner-Gulland, E. J. (2021). Mischaracterizing wildlife trade and its impacts may mislead policy processes. *Cons Letters*, 15, e12832. https://doi.org/10.1111/conl.12832
- Contestabile, M. (2021). Joined-up action for biodiversity. *Nature Sustainability*, 4, 660–661. https://www.nature.com/articles/s4189 3-021-00717-3
- Cramer, W., Egea, E., Fischer, J., Lux, A., Salles, J., Settele, J., & Tichit, M. (2017). Biodiversity and food security: From trade-offs to synergies. *Regional Environmental Change*, 17, 1257–1259. https://doi.org/10.1007/s10113-017-1147-z
- Dasgupta, P. (2021). The economics of biodiversity: The Dasgupta review.

 HM Treasury. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/96278
 5/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf
- Drakou, E. G., Pendleton, L., Effron, M., Ingram, J. C., & Teneva, L. (2017). When ecosystems and their services are not co-located: Oceans and coasts. *ICES Journal of Marine Science*, 74(6), 1531–1539. https://doi.org/10.1093/icesjms/fsx026
- Ellis, E. C., Gauthierb, N., Goldewijkd, K. K., Bliege Bird, R., Boiving, N., Díazi, S., Fuller, D. Q., Gill, J. L., Kaplan, J. O., Kingston, N., Locke, H., McMichael, C. N. H., Ranco, D., Rick, T. C., Shaw, M. R., Stephens, L., Svenning, J., & Watson, J. E. M. (2021). People have shaped most of terrestrial nature for at least 12,000 years. *Proceedings of the National Academy of Sciences of the United States of America*, 118(17), 1–8. https://doi.org/10.1073/pnas.2023483118
- Ellis, E. C., Klein Goldewijk, K., Siebert, S., Lightman, D., & Ramankutty, N. (2010). Anthropogenic transformation of the biomes, 1700 to 2000 global Ecol. *Biogeographica*, 19, 589–606. https://doi.org/10.1111/j.1466-8238.2010.00540.x
- Ellis, E. C., & Ramankutty, N. (2008). Putting people in the map: Anthropogenic biomes of the world. Frontiers in Ecology and the Environment, 6(8), 439-447. https://doi.org/10.1890/070062
- EU. (2021a). Call: Biodiversity, water, food, energy, transport, climate and health nexus in the context of transformative change. European Commission. https://www.euro-access.eu/calls/quantify_impacts_of_the_trade_in_raw_and_processed_biomass_on_ecosystems_for_offering_new_leverage_points_for_biodiversity_conservation_along_supply_chains_to_reduce_leakage_effects
- EU. (2021b). G7 Leaders' communiqué: Our shared agenda for global action to build back better. The European Council. https://www.consilium.europa.eu/en/press/press-releases/2021/06/13/2021-g7-leaders-communique/
- Failler, P., Touron-Gardic, G., Traoré, M.-S., & Chian Phang, S. (2020). Evaluating the official achievement of Aichi target 11 for West African countries: A twofold challenge of accuracy and catching-up. Science of the Total Environment, 698(134284), 1-12. https://doi. org/10.1016/j.scitotenv.2019.134284
- FAO. (2010). Aquaculture development. 4. Ecosystem approach to aquaculture. FAO technical guidelines for responsible fisheries (No. 5, Suppl. 4). FAO. 53 p https://www.fao.org/3/i1750e/i1750e00.htm
- FAO. (2020a). The state of world fisheries and aquaculture 2020. Sustainability in Action. https://www.fao.org/3/ca9229en/CA922 9EN.pdf
- FAO. (2020b). Report of the 34th Session of the Committee on Fisheries (1–5 February 2021). United Nations Food and Agriculture Organization. http://www.fao.org/3/ne907en/ne907en.pdf
- FAO. (2021). 2021 COFI declaration for sustainable fisheries and aquaculture. https://doi.org/10.4060/cb3767en
- Finance for Biodiversity. (2021). Aligning development finance with Nature's needs: Estimating the nature-related risks of development bank investments. https://a1be08a4-d8fb-4c22-9e4a-2b2f4cb7e4 1d.filesusr.com/ugd/643e85_ea2c44eb75674343ba89f690ecc4f8 a6.pdf
- Fletcher, M.-S., Hamilton, R., Dressler, W., & Palmer, L. (2021). Indigenous knowledge and the shackles of wilderness. *Proceedings*

of the National Academy of Sciences of the United States of America, 118(40), 1–7. https://doi.org/10.1073/pnas.2022218118

- Frankel, S. H. (1952). United Nations primer for development. *The Quarterly Journal of Economics*, 66(3), 301–326. https://www.jstor.org/stable/1885306
- Garcia, S. M., Rice, J., & Charles, A. (2014). Governance of marine fisheries and biodiversity conservation: Interaction and coevolution. John Wiley & Sons. ISBN:9781118392645. https://doi.org/10.1002/97811 18392607
- Garibaldi, L. A., Oddi, F. J., Miguez, F. E., Bartomeus, I., Orr, M. C., Jobbágy, E. G., Kremen, C., Schulte, L. A., Hughes, A. C., Bagnato, C., Abramson, G., Bridgewater, P., Carella, D. G., Díaz, S., Dicks, L. V., Ellis, E. C., Goldenberg, M., Huaylla, C. A., Kuperman, M., ... Zhu, C. D. (2021). Working landscapes need at least 20% native habitat. Cons Letters, 14, 2. https://doi.org/10.1111/conl.12773
- Gephart, J. A., Henriksson, P. J. G., Parker, R. W. R., Shepon, A., Gorospe, K. D., Bergman, K., Eshel, G., Golden, C. D., Halpern, B. S., Hornborg, S., Jonell, M., Metian, M., Mifflin, K., Newton, R., Tyedmers, P., Zhang, W., Ziegler, F., & Troell, M. (2021). Environmental performance of blue foods. *Nature*, 597, 360–366. https://doi.org/10.1038/s41586-021-03889-2
- Guardian. (2021). Record \$5bn donation to protect nature could herald new green era of giving. The Guardian. https://go.nature.com/3uRtd44
- Holdren, J. (2007). Meeting the climate-change challenge. Avoiding the unmanageable & managing the unavoidable. United Nations Statements. https://www.un.org/esa/sustdev/csd/csd15/statements/holdren_9may.pdf
- Hull, V., & Lui, J. (2018). Telecoupling: A new frontier for global sustainability. Ecology and Society, 23(4), 41. https://doi.org/10.5751/ES-10494-230441
- ICCA Consortium. (2021). Territories of life: 2021 report. ICCA Consortium. https://report.territoriesoflife.org/
- Independent Panel for Pandemic Preparedness and Response. (2021).

 COVID-19: Make it the Last Pandemic (p. 86). The Independent Panel for Pandemic Preparedness & Response. https://thein.dependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf
- IPBES (2019). Global assessment report on biodiversity and ecosystem services of the intergovernmental science-policy platform on biodiversity and ecosystem services. In E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo (Eds.), (p. 1148). IPBES secretariat. https://doi.org/10.5281/zenodo.3831673
- IPBES. (2021). Decision IPBES-8/1: Scoping report for the thematic assessment of the interlinkages among biodiversity, water, food and health (nexus assessment) with revised chapter structure. https://ipbes.net/sites/default/files/inline-files/Nexus%20scoping%20consolidated.pdf
- IPBES (2022a). Summary for policymakers of the thematic assessment of the sustainable use of wild species of the intergovernmental science-policy platform on biodiversity and ecosystem services. In J.-M. Fromentin, M. R. Emery, J. Donaldson, M.-C. Danner, A. Hallosserie, D. Kieling, G. Balachander, E. S. Barron, R. P. Chaudhary, M. Gasalla, M. Halmy, C. Hicks, M. S. Park, B. Parlee, J. Rice, T. Ticktin, & D. Tittensor (Eds.), (p. 33). IPBES secretariat. https://doi.org/10.5281/zenodo.6425599
- IPBES (2022b). Summary for policymakers of the methodological assessment of the diverse values and valuation of nature of the intergovernmental science-policy platform on biodiversity and ecosystem services. In U. Pascual, P. Balvanera, M. Christie, B. Baptiste, D. González-Jiménez, C. B. Anderson, S. Athayde, R. Chaplin-Kramer, S. Jacobs, E. Kelemen, R. Kumar, E. Lazos, A. Martin, T. H. Mwampamba, B. Nakangu, P. O'Farrell, C. M. Raymond, S. M. Subramanian, M. Termansen, et al. (Eds.), (p. 37). IPBES secretariat. https://doi.org/10.5281/zenodo.6522392
- IRP (2019). Global resources outlook 2019: Natural resources for the future we want. In B. Oberle, S. Bringezu, S. Hatfield-Dodds, S.

- Hellweg, H. Schandl, J. Clement, L. Cabernard, N. Che, D. Chen, H. Droz-Georget, P. Ekins, M. Fischer-Kowalski, M. Flörke, S. Frank, A. Froemelt, A. Geschke, M. Haupt, P. Havlik, R. Hüfner, et al. (Eds.), Report of the international resource panel. United Nations environment Programme. https://www.resourcepanel.org/reports/global-resources-outlook
- Kenter, J. O., & O'Connor, S. (2022). The life framework of values and living as nature; towards a full recognition of holistic and relational ontologies. Sustainability Science, 1–14. https://doi.org/10.1007/ s11625-022-01159-2
- Kitchin, R. (2014). The data revolution: Big data, open data, data infrastructures and their consequences (p. 222). SAGE Publications. https://methods.sagepub.com/book/the-data-revolution
- Kwok, R. (2019). Al empowers conservation biology. *Nature*, *67*, 133-134. https://doi.org/10.1038/d41586-019-00746-1
- Lim, F. K. S., Carrasco, L. R., McHardy, J., & Edwards, D. P. (2016). Perverse market outcomes from biodiversity conservation interventions. *Conservation Letters*, 10(5), 506–516. https://doi.org/10.1111/conl.12332
- Mace, G. M. (2014). Whose conservation? Science, 345, 1558. https://doi. org/10.1126/science.1254704
- Martin, L. J., Quinn, J. E., Ellis, E. C., Shaw, M. R., Dorning, M. A., Hallett, L. M., & Wiederholt, R. (2014). Conservation opportunities across the world's anthromes. *Diversity and Distributions*, 20, 745–755. https://doi.org/10.1111/ddi.12220
- McElwee, P., Turnout, E., Chiroleu-Assouline, M., Clapp, J., Isenhour, C., Jackson, T., Kelemen, E., Miller, D. C., Rusch, G., Spangenberg, J. H., Waldron, A., Baumgartner, R. J., Bleys, B., Howard, M. W., Mungatana, E., Ngo, H., Ring, I., & Santos, R. (2020). Ensuring a post-COVID economic agenda tackles global biodiversity loss. *One Earth*, 3(4), 448–461. https://doi.org/10.1016/j.oneear.2020.09.011
- Nat Sustain. (2021). Editorial: Setting biodiversity goals. *Nat Sustain*, 4, 189. https://doi.org/10.1038/s41893-021-00695-6
- Nature. (2008). Handle with care. *Nature*, 455, 263-264. https://doi.org/10.1038/455263b
- Obura, D. O., Katerere, Y., Mayet, M., Kaelo, D., Msweli, S., Mather, K., Harris, J., Louis, M., Kramer, R., Teferi, T., Samoilys, M., Lewis, L., Bennie, A., Kumah, F., Isaacs, M., & Nantongo, P. (2021). Integrate biodiversity targets from local to global levels. *Science*, *373*, 746–748. https://doi.org/10.1126/science.abh2234
- Ogwal, F. (2021). YouTube video added by Convention on Biological Diversity [Online]. https://youtube.com/watch?v=72O2jZ4KmH E&feature=youtu.be Timestamp 28:00 32:50.
- Ojeda, J., Salomon, A. K., Rowe, J. K., & Ban, N. C. (2022). Reciprocal contributions between people and nature: A conceptual intervention. *BioScience*, 1–11. https://doi.org/10.1093/biosci/biac053
- Ostrom, E. (1999). Coping with tragedies of the commons. *Annual Review of Political Science*, 2, 493–535. https://doi.org/10.1146/annurev.polisci.2.1.493
- Pattberg, P., Widerberg, O., & Kok, M. T. J. (2019). Towards a global biodiversity action agenda. *Global Policy*, 10(3), 385–390. https://doi.org/10.1111/1758-5899.12669
- Pendleton, L. H., Beyer, H., Estradivari, S. O. G., Hoegh-Guldberg, O., Karcher, D. B., Kennedy, E., Llewellyn, L., Nys, C., Shapiro, A., Jain, R., Kuc, K., Leatherland, T., O'Hainnin, K., Olmedo, G., Seow, L., & Tarsel, M. (2019). Disrupting data sharing for a healthier ocean. ICES Journal of Marine Science, 76(6), 1415–1423. https://doi.org/10.1093/icesjms/fsz068
- Phang, S. C., Failler, P., & Bridgewater, P. (2020). Addressing the implementation challenge of the global biodiversity framework. *Biodiversity and Conservation*, *29*, 3061–3066. https://doi.org/10.1007/s10531-020-02009-2
- Reason, J. (2000). Human error: models and management. *BMJ*, 320, 768–770. https://doi.org/10.1136/bmj.320.7237.768
- Reyes-García, V., Fernández-Llamazares, Á., Aumeeruddy-Thomas, Y., Benyei, P., Bussmann, R. W., Diamond, S. K., García-del-Amo, D., Guadilla-Sáez, S., Hanazaki, N., Kosoy, N., Lavides, M., Luz, A.

C., McElwee, P., Meretsky, V. J., Newberry, T., Molnár, Z., Ruiz-Mallén, I., Salpeteur, M., Wyndham, F. S., ... Brondizio, E. S. (2022). Recognizing indigenous peoples' and local communities' rights and agency in the post-2020 biodiversity agenda. *Ambio*, *51*, 84–92. https://doi.org/10.1007/s13280-021-01561-7

- Rice, J. (2011). Managing fisheries well: Delivering the promises of an ecosystem approach. *Fish and Fisheries*, 12(2), 209–231. https://doi.org/10.1111/j.1467-2979.2011.00416.x
- Sénit, C., & Biermann, F. (2021). In whose name are you speaking? The marginalization of the poor in global civil society. *Global Policy*, 12(5), 581–591. https://doi.org/10.1111/1758-5899.12997
- Staples, D., & Funge-Smith, S. (2009). Ecosystem approach to fisheries and aquaculture: Implementing the FAO code of conduct for responsible fisheries. FAO regional Office for Asia and the Pacific (p. 48). RAP Publication. https://www.fao.org/docrep/pdf/012/i0964e/i0964e00.pdf
- Stern Review. (2006). The stern review on the economic effects of climate change. *Population and Development Review*, 32(4), 793–798. https://doi.org/10.1111/j.1728-4457.2006.00153.x
- Swiss Re. (2021). SONAR New emerging risk insights. Swiss Re Institute. 54 p. https://www.swissre.com/dam/jcr:5a8d21b6-3dff-4178-9f10-525850e7b3db/swiss-re-institute-sonar-report-2021-final.pdf
- TEEB. (2010). The economics of ecosystems and biodiversity: Mainstreaming the economics of nature: A synthesis of the approach, conclusions and recommendations of TEEB. http://teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Synthesis%20report/TEEB%20Synthesis%20Report%202010.pdf
- Tengö, M., Hill, R., Malmer, P., Raymond, C. M., Spierenburg, M., Danielsen, F., Elmqvist, T., & Folke, C. (2017). Weaving knowledge systems in IPBES, CBD and beyond: Lessons learned for sustainability. Current Opinion in Environmental Sustainability, 26–27, 17–25. https://doi.org/10.1016/j.cosust.2016.12.005
- Turnhout, E., McElwee, P., Chiroleu-Assouline, M., Clapp, J., Isenhour, C., Kelemen, E., Jackson, T., Miller, D. C., Rusch Graciela, M., Spangenberg, J. H., & Waldron, A. (2021). Enabling transformative economic change in the post-2020 biodiversity agenda. *Conservation Letters*, 14(4), 1–8. https://doi.org/10.1111/conl.12805
- UK. (2021). Policy paper. G7 climate and environment: Ministers' Communiqué. UK Government. https://www.gov.uk/government/ publications/g7-climate-and-environment-ministers-meeting-may-2021-communique/g7-climate-and-environment-ministers-communique-london-21-may-2021
- UNCTAD. (2018). Blue BioTrade: Harnessing marine trade to support ecological sustainability and economic equity. UNCTAD/

- DITC/TED/2018/11. https://unctad.org/webflyer/blue-biotr ade-harnessing-marine-trade-support-ecological-sustainabi lity-and-economic
- UNFCCC. (2011). Ecosystem-based approaches to adaptation: Compilation of information, FCCC/SBSTA/2011/INF.8 framework convention on Climate Change. https://unfccc.int/resource/docs/2011/sbsta/eng/inf08.pdf
- WEF. (2021). The global risks report 2021 (16th ed.). World Economic Forum. https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf
- WEF. (2022). The global risks report 2022 (17th ed.). World Economic Forum. https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2022.pdf
- Whitehorn, P. R., Navarro, L., Schröter, M., Fernandez, M., Rotllan-Puig, X., & Marques, A. (2019). Mainstreaming biodiversity: A review of national strategies. *Biological Conservation*, 235, 157–116. https://doi.org/10.1016/j.biocon.2019.04.016
- Wurm, A., Tscharntke, T., Martin, D. A., Osen, K., Rakotomalala, A. A.
 N. A., Raveloaritiana, E., Andrianisaina, F., Dröge, S., Fulgence,
 T. R., Soazafy M. R., Andriafanomezantsoa, R., Andrianarimisa,
 A., Babarezoto, F. S., Barkmann, J., Hänke, H., Hölscher, D.,
 Kreft, H., Rakouth, B., Guerrero-Ramírez, N. R., ... Grass, I.
 (2022). Win-win opportunities combining high yields with
 high multi-taxa biodiversity in tropical agroforestry. Nature
 Communications, 13, 4127. https://doi.org/10.1038/s41467-022-30866-8
- Xu, H., Cao, Y., Yu, D., Cao, M., He, Y., Gill, M., & Pereira, H. M. (2021). Ensuring effective implementation of the post-2020 global biodiversity targets. *Nature Ecology and Evolution*, *5*, 411–418. https://www.nature.com/articles/s41559-020-01375-y

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