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Enabling Transformative Biodiversity Governance in the Post-2020 Era

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16.1 Introduction

While there are increasing calls for transformative change and transformative governance, what this means in the context of addressing biodiversity loss remains debated. The *aim* of this edited volume *Transforming Biodiversity Governance* is to open up this debate and identify ways forward in the context of the implementation of the Post-2020 Global Biodiversity Framework (GBF) of the Convention on Biological Diversity (CBD). To become transformative, biodiversity governance needs to be transformed: yet how and by whom? These questions are urgent, given the fact that around one million species are threatened with extinction (Díaz et al., 2019), despite over half a century of global efforts to avoid this tragedy. By bringing together insights from previous chapters, we here reflect on these questions.

The *research questions* that guided this book were:

- a) What are the lessons learned from existing attempts to address the underlying causes of biodiversity loss?
- b) What are the lessons learned from different approaches to, and instruments for, transformative governance as operationalized below?

We turn to question a) in Section 16.2, where we provide specific reflections on the theoretical and conceptual insights from the chapters in the book. In Section 16.3 we address opportunities and challenges for transformative biodiversity governance in the context of the Post-2020 GBF and its further implementation. We end with a final section with concluding remarks (Section 16.4).

16.2 Theoretical and Conceptual Insights

In this section, we summarize some of the insights from the various chapters regarding the operationalization of the main concepts of the book.

16.2.1 Our Starting Point

In Chapter 1, we defined *transformative governance* as the formal and informal (public and private) rules, rule-making systems and actor-networks at all levels of human society (from

local to global) that enable transformative change, in our case, toward biodiversity conservation and sustainable development more broadly. We argued that governance becomes transformative if it:

- a) Focuses on addressing underlying causes (indirect drivers) of sustainability issues;
- b) Implements the five governance approaches below in conjunction; and
- c) Operationalizes these approaches in the following specific manners:
 1. *Integrative*, operationalized in ways that ensure solutions also have sustainable impacts at other scales and locations, on other issues, and in other sectors;
 2. *Inclusive*, in order to empower and emancipate those whose interests are currently not being met and who represent values that constitute transformative change toward sustainability;
 3. *Adaptive*, since transformative change and governance, and our understanding of them, are moving targets, so governance needs to enable learning, experimentation, reflexivity, monitoring and feedback;
 4. *Transdisciplinary*, in ways that recognize different knowledge systems, and support the inclusion of sustainable and equitable values by focusing on types of knowledge that are currently underrepresented; and
 5. *Anticipatory*; utilizing the precautionary principle when governing in the present for uncertain future developments, and especially the development or use of new technologies (Visseren-Hamakers et al., 2021; Chapter 1).

16.2.2 Revisiting the Concept of Transformative Change

In Chapter 1 we used the following definition of *transformative change*, which was inspired by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) definition (Díaz et al., 2019): “transformative change [is] a fundamental, society-wide reorganization across technological, economic and social factors and structures, including paradigms, goals and values.” In comparison to IPBES, this definition emphasizes the need for society-wide, structural change (instead of systemic change through specific transitions, as elaborated below). It includes both the indirect drivers of biodiversity loss¹ and the values underlying these indirect drivers. Building on insights from the various chapters, we here further refine this conceptualization of transformative change to represent change of *the underlying causes* of biodiversity loss, which includes both the indirect drivers *and* the paradigms, goals and values underlying societies that determine the behavior of individuals and society at large.

Highlighting the inclusion of changing paradigms, goals and values is pivotal for transformative biodiversity governance. How and to what extent can changes in paradigms, goals and values be governed? To date, the literature on (governing) transformative change, transformations or transitions (see Chapters 1 and 4) has paid relatively little attention to this

¹ According to the IPBES GA, indirect drivers can be demographic (e.g. human population dynamics), sociocultural (e.g. consumption patterns), economic (e.g. production and trade) or technological, or can relate to institutions, governance, conflicts and epidemics (Díaz et al., 2019; Chapter 1).

question. In particular, the transition literature zooms in on transitions in specific regimes, for example the transitions on food, energy, animal-free innovation and mobility. While this focus makes analyses and governance more tangible and relevant for practitioners working in a specific regime, it diverts attention from more generic societal structures, including paradigms, goals and values. In this sense, biodiversity governance needs to be transformed in order to include explicit attention to all underlying causes, including those generic for societies at large. As sustainability issues, such as climate change and environmental justice, share many of the same underlying causes, this shift in attention implies the need to take a broader perspective beyond traditional conservation and mainstreaming policies.

Based on these insights, we propose further specifying the concept of transformative change by combining the concepts of transformations and transitions as follows. Transformations refer to changing the generic societal underlying causes, including institutions, governance structures, developments, power relationships, paradigms, goals and values (e.g. globalization, the paradigm of economic growth, values on the relationships between humans and nonhumans). Transitions focus on regime-specific underlying causes (e.g. the discourse of having to feed almost 10 billion people in 2050, thereby arguing for the intensification and expansion of agricultural production). Specific transitions are thus embedded in, and an integral part of, more generic, society-wide transformations. Together, transformations and transitions represent transformative change. Combining insights from the transformations and transitions literatures in such a manner, transformative biodiversity governance focuses both on the generic and regime-specific underlying causes of sustainability problems. This means governance mixes need to include instruments designed to realize transformative change both within specific regimes and in society more broadly (see Chapter 4 for more details).

16.2.3 Deepening Our Understanding of Transformative Biodiversity Governance

Based on the contributions of the book, we have also further nuanced the definition of transformative governance (see above for the definition as introduced in Chapter 1), especially by approaching the concept of sustainable development more broadly. Several chapters extend the idea of what transformative change for biodiversity entails, including a focus on just transitions, animal rights, rights of nature and human rights (see Chapters 8, 9 and 15), and Chapter 4 argues that transformative biodiversity governance is about prioritizing biodiversity concerns (instead of compromise or optimization approaches). Based on these insights, this book suggests that transformative biodiversity governance means prioritizing ecological, justice and equity concerns over economic ones, with a view to enabling *ecocentric, compassionate and just sustainable development*.

This notion of prioritizing biodiversity concerns in biodiversity governance seems obvious, but in practice it is not. Most biodiversity governance initiatives over the past decades have been based on deliberative, compromise approaches, in which biodiversity represents one of many interests, or optimization approaches that apply economic logic to decide whether addressing biodiversity loss “is worth it” and mostly use market-based

solutions (see Chapter 4 for an introduction to the four problem conceptions). In this sense, biodiversity governance needs to be transformed to actually prioritize biodiversity concerns. This does not mean deliberative or market-based solutions are obsolete, but they need to be applied in a manner prioritizing biodiversity concerns. As Chapter 4 highlights, governance mixes need to change over time as transformative governance is evolving, with the role of market-based instruments shrinking as the underlying causes are increasingly addressed. Deliberative approaches remain needed throughout the transformation in order for stakeholders to reflect on whether transformative governance is still on track.

16.2.4 Plurality versus Priority and Inclusiveness versus Emancipation

Authors have different views on the best ways forward to conserve and sustainably and equitably use biodiversity, and this book includes these different perspectives. Some highlight the need for plurality in biodiversity governance (Chapters 2 and 6), and argue that transformative biodiversity governance means embracing a plurality of values, including intrinsic, instrumental and relational values, as well as a plurality of worldviews and epistemologies. These different values not only represent different ways of looking at human–nature relationships but also entail different views on what the problem of biodiversity loss is and the most appropriate and effective solutions to that problem. They can in some ways be mapped onto the three main objectives of the CBD (intrinsic – conservation; instrumental – sustainable use; and relational – equitable sharing of the benefits), although the different values would also interpret the other aims differently (e.g. those holding intrinsic values would perhaps have more ambitious definitions of what sustainable use would entail, or would actually be against certain forms of sustainable use, such as trophy hunting).

Interestingly, those proposing pluralism are often not complete in the values they describe as relevant for biodiversity governance, often omitting animal rights and post-humanist values (as highlighted in Chapter 9). Moreover, the question is whether those promoting pluralism are actually making the case for including all different views. Do they really aim to defend the right of those actors responsible for large-scale habitat destruction to participate in biodiversity governance? It seems that instead they are promoting the emancipation of relational values and the rights of Indigenous people and local communities (IPLC). This is a legitimate position, but using the concept of pluralism for this purpose blurs the discussion.

Others promote the problem conception of prioritization, as opposed to compromise or optimization conceptions (Chapter 4), and actually see the call for pluralism as a suboptimal solution, representing a compromise problem conception. While recognizing and deliberating values is vital, actors have to be clear on what the problem is they are prioritizing, whether it be emancipation of certain groups of humans or nonhumans, promoting economic development, or conserving (certain types of) biodiversity. Therefore, a crucial part of transformative biodiversity governance is to explicitly discuss the values and problem conceptions of different actors – not with the aim to find compromise, but to achieve clarity on different priorities.

Also, the call for plurality is sometimes used as a call for including actors holding different values, and sometimes for including different types of knowledge, with the former relating to the concept of inclusive governance and the latter to the concept of transdisciplinary governance. These two calls are obviously related, since knowledge is value-laden, and the call for inclusiveness entails including different knowledge-holders, such as IPLC. So both calls aim to emancipate IPLC and recognize their values and knowledge systems. This is an important societal goal, but a different priority from addressing biodiversity loss per se (although they are related since IPLC play an important role in conserving and sustainably using biodiversity). Also, these calls have different implications for biodiversity governance, since basing biodiversity governance on integrated bodies of knowledge is different to facilitating the participation of different types of stakeholders. This difference is not always clear in calls for plurality.

Moreover, value plurality is different to diversity in problem conceptions. Values inform and underlie problem conceptions. So it is possible for coalitions striving for the same priority (e.g. addressing biodiversity loss or promoting IPLC rights) to include actors representing different values. However, in practice these differentiations between different values and between different priorities is not made explicit. In transformative biodiversity governance, actors should discuss these differentiations to see whether they really represent one, or several, perhaps overlapping discourse coalitions, and deliberating values should precede discussing priorities.

This touches upon the definition of inclusive governance as part of the operationalization of transformative governance in Chapter 1. We stated there that it should be operationalized in ways that empower those whose interests are currently not being met and represent values embodying transformative change for sustainability. This means a strategic approach toward participatory processes: so not including all stakeholders for the purpose of compromise, but designing the participatory process in such a manner that it emancipates those who prioritize transformative sustainability. Obviously, all stakeholders should be heard to design a legitimate process, but this does not mean a process of compromise. The ambition for prioritizing transformative sustainability, or ecocentric, compassionate and just sustainable development, should be leading for the design of the participatory process. We need inclusive governance that contributes to changing power dynamics from the domination of unsustainable politics and practices to sustainable ones. These insights are in line with more critical perspectives that incorporate politics, power and equity issues in the debates on transformations.

So, while this book set out to include analytical, normative and critical approaches to study transformations (Burch et al., 2019), we have come to the conclusion that any such analysis is, in essence, normative, since analyses that do not incorporate issues of power and justice could be seen to implicitly accept current power relationships. Transformative change and governance – or lack thereof – and their analysis are, therefore, in essence political and normative.

16.2.5 Emerging Values for the Governance of Transformative Change

Rights of nature, animal rights, Buen Vivir, degrowth and convivial conservation are some of the alternative approaches that this book has covered. Despite comprising

different normative visions (for a comparison see Escobar, 2015), they commonly share criticisms of the current neoliberal socioeconomic system, capitalism and/or focus on instrumental values of nature as the underlying causes of ecological crises (Acosta, 2013; Büscher and Fletcher, 2020; Escobar, 2015; Gudynas, 2019). These approaches often advocate replacing the dominant paradigm of economic growth and capital accumulation and suggest broader cultural, political and social transformations of institutions and practices (Büscher and Fletcher, 2020; Demaria et al., 2013; Escobar, 2015). The adoption of rights of nature, animal rights and the rising popularity of the “Buen Vivir” notion, for instance, can precipitate new forms of transformative biodiversity governance in which the modern human–nature dichotomy and anthropocentrism are no longer the dominant ontological assumptions, human, nature and animal well-being are not subordinate to economic reasoning, and the relationships between humans and nonhumans are redefined. Moreover, there is growing interest in understanding how alternatives can unfold over time and space to enact transformative change, away from neoliberal logic and practices, and breaking current lock-ins (Schmid, 2019). For instance, Feola et al. (2021) illustrate how creating space for a postcapitalist alternative requires “unmaking” current capitalist structures that are at the root of the current ecological crisis.

The recognition of alternative values, beliefs, worldviews and approaches can serve to form new conceptualizations of transformative change toward multispecies justice (Celermajer et al., 2021) – or actually represent such transformative change. These new approaches can be understood as a reconfiguration of justice, recognizing rights of ecosystems holistically, including nature, animals and human beings, and calling for the establishment of alternative structures, institutions and processes. Multispecies justice requires rethinking liberalism as the dominant political ideology, rethinking the social contract tradition, and rethinking democracy and representation (Kopnina et al., 2021). Reconfigurations of justice also include paying increased attention to intergenerational justice concerns and the rights of future generations (Hiskes, 2009; Shue, 2014). Considering that these (justice) alternatives are grounded in (and inspired by) a dense network of social mobilizations, civil society, activists and new forms of transnational actor constellations, discussing them sheds light on the importance of bottom-up processes, since these processes enable transformations (in contrast to specific transitions) of the society-wide underlying causes of our current unsustainability. Particularly, it allows for stronger consideration of local knowledge and experiences for transformation, in parallel with traditional top-down conservation practices. Realizing the right to participate in transformation processes for these representatives of transformative values will, therefore, be a core concern in the transformation toward ecocentric, compassionate and just sustainable development.

16.2.6 Can Transformative Change be Governed?

Yes it can, to a certain extent. “Coalitions of the willing,” including governmental, civil society and market actors sharing the same priorities, can together develop governance

mixes focused on accelerating transformative change, addressing the main (generic and transition-specific) underlying causes of sustainability issues through a process of transformative governance, including the five governance approaches introduced above and in Chapter 1. Over time, the governance mixes will need to be adjusted to reflect what the change process requires during its evolution. Various competing coalitions representing different priorities will emerge and the process will inevitably be complex. Nevertheless, governance can progressively become transformative, since governing transformative change becomes easier as the underlying causes are increasingly addressed.

16.3 Challenges and Opportunities for Transformative Governance through the Post-2020 GBF

As noted in Chapter 1, the focus of biodiversity policy has broadened over time from conservation to mainstreaming. Now the call for transformative change and addressing indirect drivers adds a new dimension to biodiversity governance. Based on insights from the chapters in this book and a review of emerging literature on the Post-2020 GBF, we here examine challenges and opportunities for the GBF and its further implementation to contribute to transformative change for biodiversity. We address how the transformative character of the GBF and its further implementation can be harnessed using the overall conceptualization of transformative governance applied in this book. We especially look at the governance mechanisms that the GBF puts forward in more or less explicit terms: the whole-of-government approach, the whole-of-society approach, ensuring just transitions, implementation support mechanisms, and the responsibility and transparency mechanism. First, we address the question of how to understand the role of the GBF in achieving transformative change.

16.3.1 What Makes the Post-2020 GBF Transformative?

In various negotiation drafts of the GBF, its stated ambition has been that the framework should be transformative. This, first and foremost, requires the framework to focus on addressing the underlying causes of biodiversity loss in an equitable manner and be part of the broader sustainability agenda of the Sustainable Development Goals (SDGs). The GBF is built around a theory of change that recognizes that urgent policy action globally, regionally and nationally is required to transform economic, social and financial models. It assumes that whole-of-government and whole-of-society approaches are necessary. The framework's theory of change "*assumes* that transformative actions are taken to (a) put in place tools and solutions for implementation and mainstreaming, (b) reduce the threats to biodiversity and (c) ensure that biodiversity is used sustainably in order to meet people's needs and that these actions are supported by enabling conditions, and adequate means of implementation, including financial resources, capacity and technology." It also "*assumes* that progress is monitored in a transparent and accountable manner with adequate stocktaking exercises to ensure that, by 2030, the

world is on a path to reach the 2050 Vision for biodiversity” (CBD, 2021a: paras. 5–7, italics added).

While the GBF has the ambition of galvanizing urgent and transformative action, it provides little detail on how to achieve this, beyond setting ambitious goals that form the core of the GBF (Díaz et al., 2020). The first draft of the GBF addresses indirect drivers, such as “reduce negative impacts” from businesses and “full sustainability for extraction and production practices,” as well as “harmful subsidies.” However, it does this without giving guidance on how to identify what type of action (and by whom) is needed to successfully implement it. The GBF also contains provisions for implementation support mechanisms, enabling conditions (including finance), the responsibility and transparency mechanism, and a mechanism for outreach, awareness and uptake (CBD, 2021a). The GBF is meant to be a voluntary international governance mechanism to achieve transformative change for biodiversity. To realize its goals and targets it will depend on, among others, the mainstreaming, capacity building and resource mobilization strategies that the CBD is developing in support of the GBF, and consequently the domestic implementation of whole-of-government (see King, 2020 and Yang et al., 2019) and whole-of-society approaches for transformative biodiversity governance (Pattberg et al., 2019).

Different views exist about the role the Post-2020 Framework can play in achieving transformative change. As also noted by Bulkeley et al. (2020), transformative change in the GBF is mostly defined in terms of its outcomes, and not how goals and targets will be achieved. Some refer to the GBF as the blueprint or roadmap for global biodiversity governance (Phang et al., 2020), while others suggest that the GBF provides a set of shared principles that can act as a guiding “compass,” establishing a common direction of travel (Birdlife International, 2019; Bulkeley et al., 2020; 2021a; Franks, 2020; Grumbine and Xu, 2021).

Yet, based on literature on the governance of transformations (Burch et al., 2019; Masarella et al., 2021; Patterson et al., 2017, Visseren et al., 2021; see also Chapters 1, 3 and 4), we suggest that both governance *for* transformative change – the vision and conditions that enable others to take action on this agenda – and transformation *in* governance arrangements is needed if we are to realize these outcomes. Setting ambitious goals is not sufficient. If biodiversity governance seeks to galvanize transformative change, it must embrace transformation in its working arrangements, mechanisms and institutions (Bulkeley et al., 2020; 2021a). Grumbine and Xu (2021: 638) highlight that “fulfilling the goals of the CBD will not occur without strategic learning about societal change, explicit incorporation of climate concerns into conservation; future-forward reframing of what protected means, mainstreaming environmental values into multiple rules and regulations, and finding the money to pay for it all.” So the GBF needs to include not only ambition for the “what” but also the “how” – in other words, not only ambition for transformative change, but also transformative governance.

16.3.2 *The Whole-of-Government Approach*

The “whole-of-government approach” advocated by the GBF points at the dimensions of *integrative* and *adaptive* governance. Biodiversity governance needs active support from

a range of other policy domains to address the indirect and direct drivers of biodiversity loss. *Integrative governance* can become transformative if “solutions also have sustainable impacts at other scales and locations, on other issues and in other sectors” (Chapter 1). This requires that policy domains such as trade and finance, climate change, agriculture and development take into account biodiversity in implementing sustainable transformation pathways, and that dependencies, risks and benefits of nature in these policy domains are recognized and prioritized. Integration of biodiversity concerns in other policy areas in turn will have implications for biodiversity policy, forcing it to go beyond its traditional conservation approach to deal with competing priorities and a plurality of values (Fougeres et al., 2020; Pascual et al., 2021). Next to questions of such horizontal policy coherence, the analysis of the role of cities (Chapter 14) shows the need to include multilevel governance approaches, among others, in the sense that cities, as subnational actors, increasingly play an independent role in transforming biodiversity governance beyond implementing national policies.

As analyses in this book have also shown, transformative change necessitates new ways of doing things, including creating *new spaces for transformative action* and new institutions. Hence *adaptive governance* is required to “enable learning, experimentation, reflexivity, monitoring and feedback” (Chapter 1) in developing and engaging with transformation pathways to achieve transformative change. Contestation and politics is inevitable when creating such pathways. It also requires breaking down business-as-usual approaches, as we need to consider the structures and conditions causing biodiversity loss. It is thus urgent to open up a space for alternatives and consider possible pathways and futures that are currently neglected or marginalized in sustainability debates because they are considered “unfeasible” or not “cost-efficient” (Beck and Oomen, 2021). Considering this “space for alternatives” helps to address underlying causes of sustainability issues and hence explore “radical” alternatives that literally go to the root causes of current societal problems (Meadows, 1999) and imagine desirable futures (Stålhammar, 2021) that, for example, could inform the mainstreaming discussions from a transformative change perspective. Chapter 13 identifies an inclusive vision linking biodiversity to national development, social capital for integrative governance among governmental and private actors, as well as adaptive learning as key elements for governance realizing transformative change.

The mainstreaming agenda is a long-standing discussion in the CBD focusing on integration and policy coherence (EMG, 2021). It is clear that integrative approaches need to overcome multiple challenges. These range from legal challenges related to the fragmentation of international law and the different mandates and memberships of various bodies and conventions, to epistemological challenges linked to the sheer difficulty of biodiversity as a subject matter and the lack of, and differences in, understanding between different scientific and policy communities. This last point also shows the importance of transdisciplinary governance to “recognize different knowledge systems, and support the inclusion of . . . types of knowledge that are currently underrepresented” (see Chapter 1).

Various chapters (e.g. Chapters 5 and 9) have argued for the need to broaden the regime complex for biodiversity through a One Health approach and to strengthen links between

the CBD, World Health Organization (WHO), Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (OIE). This resonates with the experience of the global community regarding the COVID-19 pandemic. In the early days, One Health mainly focused on nature-related health risks, taking potential nature-related health benefits far less into account and, similar to biodiversity governance, not addressing indirect drivers and structural change. Later, One Health was given a broader perspective, including nature-related health benefits (e.g. WHO and CBD, 2015) and incorporating a more systemic approach with *structural One Health* (Wallace et al., 2015). Gradually, over time, more and more professional communities were convinced of the importance of a One Health approach, but before COVID-19 it was far from *mainstream*. The pandemic strongly highlighted the interlinkages between biodiversity, wildlife and human health. It has underscored the urgency of tackling the root causes of biodiversity loss and promoting fair and equitable policies when tackling global challenges, with a focus on the vulnerable and the disenfranchised, who often happen to be biodiversity stewards. This led to broader support for the One Health approach, beyond the One Health expert communities, yet still with a diversity of conceptualizations and practical strategies (Chapter 5).

Another important issue for consideration in a “whole-of-government” approach is the link between biodiversity and oceans. Chapters 10 and 15 on bioprospecting and ocean governance elaborate rights-based proposals to link the biodiversity and oceans regimes by focusing on issues of access and benefit-sharing. As negotiations on oceans continue under the UN General Assembly, the equity question concerns how to secure benefits from global common resources for all, not only for politically, financially or technologically strong actors. Chapter 10 proposes a way to deal with bioprospecting to serve public interests. Chapter 15 proposes an alternative governance approach for oceans, building on the interdependencies between human rights and marine biodiversity, and a broader approach to fair and equitable benefit-sharing to support transformative governance for oceans at various scales. Enhancing the interdependency between human rights and marine biodiversity is suggested to address the indirect drivers of biodiversity loss, including power dynamics. These are also examples of how changing the essence of resource use (moving from market logic to public logic) is essential to enable such synergies between ocean governance and biodiversity governance, an example of how addressing the indirect drivers can support conservation and equitable use.

The fundamental question is how to make the “whole-of-government agenda” transformative. This attention to other sectors does not imply lowering the ambitions for conservation. Ecosystem- and species-focused conservation remains vital in the Post-2020 era. The whole-of-government approach should be seen as an additional priority, not a replacement of conservation, as discussed elsewhere in this book (e.g. Chapter 11). Possible starting points range from intensified cooperation between scientific bodies to recognize the multiple values of nature in various policy domains (e.g. the IPBES and IPCC workshop report on biodiversity and climate change [Pörtner et al., 2021]) to promoting high-level recognition of biodiversity’s contribution to all SDGs (Erdelen, 2020), the further development of rights-based approaches to sustainable use and benefit-sharing, taking into account the biodiversity footprint of consumption and production (Chapters 8,

12, 14 and 15), as well as governmental initiatives to promote biodiversity considerations and biodiversity safeguards within relevant sectors (Chapter 13). It finally requires seriously considering biodiversity as a political priority that needs to be dealt with in coherence with climate change, and understood as a socioeconomic development issue that requires us to reshape our economic system (Dasgupta, 2021; Otero et al., 2020; World Bank, 2021; see also Chapter 4).

16.3.3 The Whole-of-Society Approach

Next to the whole-of-government approach, the GBF advocates a stronger engagement with actor groups beyond the state through a “whole-of-society” approach. This includes civil society, cities and subnational governments, IPLC, business, finance and youth. The GBF argues that “all relevant stake- and rightsholders need to be involved in realizing its objectives” (CBD, 2021a: para. 2).

Transformative biodiversity governance must be inclusive, strategic and purposeful, with an aim of focusing on actors that want to influence the indirect drivers of biodiversity loss. In Chapter 1, the dimension of inclusive governance suggests focusing on “empower[ing] and emancipat[ing] those whose interests are currently not being met and who represent values that constitute transformative change toward sustainability.” Through the UN major-group system, the CBD has a long tradition of involving various stakeholders in its formal processes, specifically promoting the participation of IPLC. Beyond that, processes are in place to strengthen the position of, for example, cities and subnational governments (Edinburgh process) and businesses that want to contribute to nature-positive strategies. However, more imaginative inclusion processes are needed: the recent shift in international policy domains like climate change (the UNFCCC), oceans and the SDGs encouraging a stronger role for nonstate actors marks a shift in international environmental governance that goes beyond traditional representation of major groups as in the CBD processes (Pattberg et al., 2019).

This development toward stronger involvement of nonstate and subnational actors is not uncontested and has at least two dimensions (see also Chapter 3). It requires working with nonstate actors with the power and ability to induce ownership and leadership to work for biodiversity (Bull and Brownlie, 2017; Bull et al., 2020; Smith et al., 2019), as well as addressing vested interests that may resist transformative change. Such vested interests may include sectors that are based on the (often unsustainable) use of natural resources, including biodiversity. Examples of the latter are provided in Chapters 10 and 13 in industry responses to the evolving regulation of marine bioprospecting in polar regions and biodiversity policy integration in agricultural landscapes. These businesses are seldomly engaged in biodiversity governance and may use domestic implementation of international agreements to create room to maneuver. Political will is needed to address regulatory and implementation gaps in current legislation, power asymmetries and trade-offs between different policy objectives.

As illustrated by Chapter 14, cities provide a case in point of how the involvement of nonstate and subnational actors provides opportunities for the Post-2020 GBF (see also Bulkeley et al., 2021b; Xie and Bulkeley, 2020). Urban biodiversity governance is recently being transformed both in terms of its focus – moving from only a concern with reducing the threat of cities to biodiversity to also realizing their benefits – and in terms of the forms that governance is taking – through governance experimentation in cities and the growth in transnational governance networks. The growing recognition of cities as key agents of change and as presenting both opportunities and challenges for governing biodiversity is also relevant for business, finance and other nonstate actors (Meijer et al., 2021; Smith et al., 2019; van Oorschot et al., 2020).

Some of the challenges that the urban agenda illustrates include the need to go beyond biodiversity and nature-based solutions as win–win solutions to also addresses the underlying causes of biodiversity loss beyond city boundaries, among others through unsustainable production and consumption (i.e. the biodiversity footprint). It also requires answers to the questions of how to address injustice, and the risk that governing urban nature will entrench forms of neoliberal economic development and social exclusion. The way inclusiveness is taking shape continuously needs to be examined. And, lastly, urban governance needs to respond to such challenges through new institutional mechanisms, since existing institutions will most likely not be able to do so. This in turn shows the limitations of integrative forms of governance, as it suggests that it will not be sufficient for global institutions and transnational networks to promote urban action on nature; they will need to play a critical part in building the capacity and vision needed for cities to ensure they take action for nature within and beyond urban boundaries, not only contributing to global biodiversity goals but also ensuring social justice. That is why our operationalization of transformative governance (see above) highlights that integrative and inclusive governance need to be implemented in conjunction.

The “whole-of-society” approach can contribute to a transformative GBF, if fully embedded throughout its theory of change. This implies that nonstate actors will be included in the goals and targets to address indirect drivers, and that the mainstreaming and capacity-building strategy is extended to nonstate actors and social movements to empower them in enhancing nature-inclusive transitions and broader society-wide transformative change, and include them in the responsibility and transparency mechanism for the GBF.

16.3.4 Ensuring Just Transitions

Another element of transformative biodiversity governance, and especially pertinent for the further implementation of the Post-2020 GBF, is the issue of justice and equity (see Chapters 4, 7, 8, 9, 10, 11, 12, 14 and 15). This relates to the *inclusiveness* dimension of transformative governance (Chapter 1). The depth, scale and urgency of transformative change require heightened attention to both existing injustices and the advancement of multiple dimensions of justice, including procedural justice, recognition and distributive

justice. Various chapters suggest proposals for combining conservation and justice objectives.

A strong access and benefit-sharing (ABS) regime, for example, can support conservation while promoting equity and justice considerations. This represents an example of synergies between justice and equity concerns on the one hand and conservation concerns on the other. Technological developments such as bioinformatics and synthetic biology, addressed in the CBD negotiations under the umbrella term “digital sequence information” (DSI), can both enable or disable this trend. Through these developments, harvesting for bioprospecting may be less necessary, since the information derived from genetic resources can be publicly available in biobanks long-term. On the other hand, unless such public access to data is accompanied by strong provisions to ensure fair and equitable benefit-sharing, including capacity building to analyze it, these technological developments risk reinforcing global asymmetries in bio-based research and development (Chapter 7). Thus, broad ABS rules, in addition to a radical restructuring of the intellectual property rights system, are needed to move toward transformative biodiversity governance that is inclusive and emancipatory (see also Chapters 10 and 15).

The efforts in the GBF to expand protected areas and other effective conservation measures also opens up questions of justice; namely, its redistributive effects and issues of procedural justice and recognition in decision-making (Chapters 8, 11 and 12). Although the redistributive effects of protected area expansion are often understood in human terms (for an example, see Schleicher et al., 2019), an ecological justice perspective – which extends compassion and rights to the entire living community – draws attention to the ways in which protected area expansion redistributes the Earth’s resources between humans and nonhumans (Bhola et al., 2020; Fougères et al., 2020; Kopnina et al., 2018). A perspective on justice that encompasses both human and nonhuman concerns could highlight possible areas of convergence between ecocentric conservation and social justice activists. Chapter 11 specifically addressed new approaches for protected and conserved areas to ensure that positive biodiversity outcomes are accompanied by equitable outcomes for IPLC. Here, especially, inclusive and transdisciplinary governance becomes relevant for recognizing different knowledge systems, and supporting the inclusion of multiple values by focusing on types of knowledge that are currently underrepresented in conservation. In this regard, the broadening and pluralizing of ways of understanding nature (Chapter 2) is fundamental for creating a space that focuses on the inclusion of currently underrecognized knowledge systems. Conservation, therefore, should recognize and enforce the rights of IPLC (Armitage et al., 2020), animal rights and rights of nature as part of a vision of ecocentric, compassionate and just sustainable development.

It is also important to take distributional justice into account, to address consumption and production in developed and newly industrialized countries, which have the largest impact on global biodiversity loss. This requires the GBF to take a differentiated approach regarding responsibilities in addressing the loss of biodiversity. Developed and newly industrialized countries and relevant nonstate and subnational actors such as business and cities need to address the underlying drivers of biodiversity loss linked to

unsustainable production, consumption and global trade, which negatively impacts biodiversity in low-income countries. This latter point is also stressed in Chapter 12 on convivial conservation and structural transformation (see also Buscher and Fletcher, 2020). This chapter argues that fundamental changes in consumption patterns, global trade and the world economy cannot be achieved through mainstream institutional and societal structures. Instead, transformative governance will need to take a “whole Earth” approach and address the indirect drivers of biodiversity loss, including land use, economic development and economic growth. The chapter proposes “Biodiversity Impact Chains” (BIC) as a potential political methodology and a transformative governance mechanism. The basic idea behind BICs is to better understand and politicize the relationships among different actors and the impacts that their livelihoods and consumption choices have on biodiversity elsewhere. BICs challenge many of the embedded assumptions in biodiversity policy by refocusing attention on those with the largest footprints.

Underlining the need to strengthen equity in biodiversity governance, various chapters (5, 9, 10, 15; see also Bernstein et al., 2021) argue for upholding a rights-based approach in the GBF to promote embedding justice and equity concerns in its enabling conditions, equitable access to finance and intergenerational equity. Moreover, rights-based approaches are critical for groups such as IPLC who, despite being at the forefront of biodiversity conservation and sustainable use, are often left behind due to power asymmetries. These “traditional” rights-based approaches can be complemented by more novel approaches to biodiversity governance, including rights of nature and animal rights. Chapters 2 and 9, for instance, argue that integrating animal rights and rights of nature approaches is necessary to fully enable ecocentric approaches in biodiversity governance, and that such an integrated approach should be included in the (implementation of the) GBF to enable transformative change. In particular, extending the agenda with animal rights perspectives would be a novel step from a biodiversity governance perspective that would enable compassionate sustainable development.

Chapter 8 summarizes how principles of justice and equity could be interpreted and upheld in efforts to pursue transformative biodiversity governance. The chapter suggests the following policy options: further development of international norms of justice and equity in global sustainability governance and across all three objectives of the CBD; better compliance with or fulfillment of existing norms; and stronger integration of justice concerns and procedural rights in biodiversity policy-making, implementation and review at all levels of governance. This can also build on SDG implementation that includes goals on equity. Alongside more conventional measures to alleviate the impacts of conservation initiatives on marginalized groups (including social impact assessment and financial transfers), just transformation is likely to require strengthening broad-based social safety nets, international recognition of Indigenous and community conserved areas (ICCAs) and other measures to remedy unjust asymmetries of power in political systems (e.g. land reform and recognition of indigenous rights).

16.3.5 Implementation Support Mechanisms: Mainstreaming and Finance

The national implementation challenge has long been recognized in the CBD (see Chapter 3). In addition to the Post-2020 GBF itself, the CBD is developing support mechanisms for domestic implementation, including a resource mobilization strategy, a strategic framework for capacity building, a mainstreaming strategy, a gender plan of action and a communication strategy. Building also on the analysis regarding whole-of-government, whole-of-society and just transitions in this section so far, we here address the issues of mainstreaming and resource mobilization in the context of national implementation.

Mainstreaming of biodiversity, as a form of integrative governance, is one of the main strategies of the CBD, as exemplified by the new long-term strategy for mainstreaming that is being developed as a complement to the Post-2020 GBF (CBD, 2021b). The recognition of the need for a whole-of-society approach, as discussed above, has major implications for mainstreaming strategies and will need to include nonstate actors (Milner-Gulland et al., 2021). Chapter 13 on agriculture provides an example of how a transformative change lens is relevant for mainstreaming biodiversity in other policy domains. The chapter finds that biodiversity policies are predominantly “add-on” and agricultural policies so far neither directly address biodiversity-threatening agricultural practices nor specifically support more “nature-inclusive” agriculture. Thus, existing knowledge on biodiversity-sound agriculture is not reflected in dominant agricultural policies and practices. The authors argue that political will can target the following leverage points to transform existing governance structures for agriculture: a) working toward a clear vision for sustainable agriculture (Wanger et al., 2020); b) building social capital; c) integrating private sector initiatives and d) better integrating knowledge and learning in policy development and implementation. The Post-2020 GBF should focus on the transformation of agricultural governance systems by concretely addressing key leverage points and providing specific guidance for Parties to address country-specific drivers and potential for sustainable innovation and change through biodiversity policy integration in the agricultural sector. Since the agricultural sector especially touches upon many different sustainability issues, including climate change, water use, animal welfare, pollution and biodiversity, such mainstreaming of biodiversity should be seen as part of a broader agenda for ecocentric, compassionate and just sustainable development.

A resource mobilization strategy is under development (CBD, 2021c) to realize the financial resources required, as put forward in the specific targets on finance in the GBF. Chapters 6 and 8 address these issues. Chapter 6 critically examines the transformative potential of biodiversity finance. This addresses part of the challenge put forward by IPBES to reform the current economic and financial system. The chapter argues that biodiversity finance has not yet challenged the foundations of the capitalist system that has often been argued to undergird many of the known drivers of biodiversity loss, because it reproduces the existing (skewed) power relations that this system builds on. According to the authors it seems implausible that, on their own, innovative financial instruments can bring about the fundamental transformation that is advocated in this book, although they can contribute to

catalyzing it. Financial instruments represent the market-based instruments that, as Chapter 4 argues, will have an increasingly smaller role as the sustainability transformation progresses. In this respect, they are rather transitory facilitators of the transformative changes required for effective biodiversity conservation and, therefore, a component of a broader system of transformative governance. With respect to resource mobilization, Chapter 8 argues that this requires credible, time-bound, multilateral, national and nonstate commitments to scale-up resource mobilization to support biodiversity policy in developing countries – including meaningful progress on the multilateral benefit-sharing mechanisms in the context of the ABS framework.

16.3.6 Responsibility and Transparency

The GBF states that “its successful implementation requires responsibility and transparency, which will be supported by effective mechanisms for planning, monitoring, reporting and review” (CBD, 2021a: paras. 18–20). A responsibility and transparency mechanism is key to ensuring that countries and society can change course when ambition and implementation gaps become evident. This relates to the idea of adaptive governance: “transformative change and governance, and our understanding of them, are moving targets, so governance needs to enable learning, experimentation, reflexivity, monitoring and feedback” (Chapter 1). Such a mechanism is largely missing within the CBD and countries have to date been unwilling to implement a legally binding compliance mechanism, and for the GBF now seem to opt for a nonpunitive, voluntary system for accountability (Chapter 3).

Accountability could be strengthened through more transparency in reporting on the progress of Parties and nonstate actors, especially on addressing indirect drivers (Milner-Gulland et al., 2021). Furthermore, meaningful ways of monitoring and evaluating equity in conservation, sustainable use and benefit-sharing need to be put in place. A potential pledge and review mechanism shows promise and could be accepted by Parties, if accompanied by a robust resource mobilization mechanism (Chapter 8). In addition, peer-review mechanisms could be strengthened to facilitate learning. The main challenge here is to make the contribution and commitments of countries to the Post-2020 targets more directly visible and attributable, and if needed to step up ambitions and actions.

16.4 Concluding Remarks

The GBF deliberations have the ambition to develop a transformative framework for a new phase in biodiversity governance, and shape the agenda for new and more effective biodiversity policies across governments and society at large for the coming decade. Over half a century of conservation efforts around the world have failed to bend the curve for biodiversity – in fact the downward curve has steepened despite our efforts. We need to essentially transform the ways in which we govern biodiversity – tweaking the system will

not be enough. Transformative biodiversity governance means prioritizing ecological, justice and equity concerns through addressing the root causes of biodiversity loss.

This book has developed ideas to make biodiversity governance transformative. One of the main aspects of our operationalization of transformative governance is the implementation of five governance approaches: integrative, inclusive, adaptive, transdisciplinary and anticipatory, operationalized in a specific manner, in conjunction and focused on the underlying causes of biodiversity loss and unsustainability. The individual approaches themselves cannot become transformative without being implemented with the other dimensions in mind. In this sense, these approaches serve as a heuristic and guidance to further develop and implement transformative governance. The GBF and its implementation, therefore, must be continuously evaluated and adapted as a system of approaches that only together can become transformative.

In order to do so, the global community can apply the guidance on transformative governance as suggested in this volume in the further development and implementation of the GBF, and the SDGs more broadly. The GBF should, therefore, not only be transformative but also be governed transformatively, and should:

- Prioritize halting biodiversity loss through actions across all levels of governance, around the world, in all sectors and on all issues, including biodiversity impacts elsewhere (integrative governance);
- Strategically design the participatory processes in order to empower and emancipate those whose interests are currently not being met and who represent values that constitute transformative change toward sustainability (local stewards of biodiversity, rights of nature, animal rights);
- Regularly evaluate whether implementation is still transformative by addressing indirect drivers and prioritizing ecocentric, compassionate and just sustainable development (adaptive governance);
- Ensure all knowledge systems are respected and all necessary types of knowledge are being used and facilitated (transdisciplinary governance);
- Apply the precautionary principle, not only in relation to new technological developments, but also more broadly in policy (anticipatory governance).

Parties to the CBD, and all other actors and stakeholders, can continuously reflect on the extent to which the process and governance mixes are truly transformative. Through this process of prioritization and learning, global biodiversity governance in the Post-2020 era can become increasingly transformative in order to achieve the goal of halting biodiversity loss and restoring nature. If the global community truly wants to transform our societies and achieve the Sustainable Development Goals by 2030, and the goals and targets of the GBF, we urgently need to change our priorities toward ecocentric, compassionate and just sustainable development – and the ways in which we govern the transformation toward those priorities.

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