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Rethinking and Upholding Justice and Equity in Transformative Biodiversity Governance

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8.1 Introduction

Justice and equity are fundamental to the complex choices that societies need to make to achieve transformative change (Bennett et al., 2019; IPBES, 2019; Leach et al., 2018; Martin, 2017). Evidence that more socioeconomically unequal societies tend to experience higher rates of biodiversity loss (Holland et al., 2009; IPBES, 2019) suggests that injustice and threats to biodiversity are closely intertwined. Injustice can function as an underlying cause of biodiversity loss, such as where colonial expropriation of Indigenous peoples' land paves the way for its exploitation (Martinez-Alier, 2002). Similarly, biodiversity loss can create new injustices or exacerbate existing ones, for example where the destruction of ecosystems accelerates risks such as climate change or pandemics that disproportionately affect the poor (Kashwan et al., 2020). Alleviating unjust conditions could provide a catalyst for environmentally sustainable governance (and vice versa), as where respecting and securing the land rights of marginalized groups enhances the ecological integrity of biologically diverse areas (IPBES, 2019). However, a major challenge for achieving transformative governance in practice is that measures to address biodiversity loss or social injustice can give rise to trade-offs between these goals. Accordingly, efforts to pursue transformative biodiversity governance need to acknowledge social-ecological complexity, expose existing conditions of injustice and embrace opportunities to overcome them.

In the context of this chapter, we understand justice and equity as crucial features of both the means and the ends of transformative biodiversity governance: they are important not only for their instrumental role in addressing biodiversity loss, but also because they are among the core social values that transformative governance aims to rethink and pursue (throughout the chapter, we generally use the term "justice" as shorthand for "justice and equity" unless otherwise specified; Section 8.2 notes different usages of the two terms). Accounts of transformative governance – such as the one that informs this collection – often see *inclusive* governance as an integral feature of the concept (Chapter 1; IPBES, 2019). Including different groups with diverse worldviews, experiences, knowledge systems and

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values requires respect, trust, mutual understanding and dialogue, and can be seen as a key requirement of procedural justice. The idea of inclusive governance provides an important conceptual entry point for recognizing justice as a core element of transformative governance. However, as we will show, inclusion is only one among several principles of justice that transformative governance needs to take into account. More broadly, the pursuit of justice speaks to another key feature of transformative governance, which is that it must be *integrative* in seeking synergies and minimizing incoherence not only across sectors, institutions and policy instruments, but also across societal goals, including justice and sustainability (Chapter 1; IPBES, 2019).

The question of what justice involves is complex, contested and often overlooked in policy-making. Despite considerable advances in theorizing social and environmental justice and applying these theories to biodiversity governance, there has been little exploration to date of whether and how justice could strengthen the transformative potential of biodiversity governance. This gives rise to the overall question that this chapter addresses: *How should principles of justice and equity be interpreted and upheld in efforts to pursue transformative biodiversity governance?*

To address this question, we begin in Section 8.2 with an overview of evolving theories and norms of justice and equity in biodiversity governance. In Section 8.3 we illustrate how the need for transformative change demands a rethink about what justice entails and requires in the context of biodiversity governance. Then in Sections 8.4–8.6 we address justice in three key stages of transformative governance to address the direct and indirect drivers of biodiversity loss: How should decision-making processes be structured (Section 8.4)? How should financial resources for achieving transformative change be mobilized and allocated (Section 8.5)? And how should transformative biodiversity initiatives be designed and implemented (Section 8.6)? These three areas offer a framework for discussing several important areas of debate about justice in biodiversity governance, including the roles of Indigenous peoples and local communities (IPLC) (Section 8.4), relations between the Global South and North (Section 8.5) and the social impacts of protected area expansion and biodiversity mainstreaming (Section 8.6). While our review does not exhaustively cover all aspects of justice in transformative biodiversity governance, it is complemented by other chapters in this collection, including on emerging technologies (Chapter 7), animals (Chapter 9), and access and benefit-sharing (Chapters 10 and 15). Section 8.7 sets out policy recommendations emerging from the preceding sections, and Section 8.8 concludes.

Throughout the chapter we conduct an integrative review (Snyder, 2019) that critically assesses key theoretical and empirical literature (mainly spanning the period 2010–2020) on justice and equity in biodiversity governance, while also drawing parallels with related areas of environmental governance. Our review is supplemented by the analysis of documents produced by the UN Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC), as presented in Figure 8.1. While our primary focus is on governance at the global scale – in particular the CBD – we also discuss how concerns of justice and equity arise in local and national governance, given that these concerns are linked across multiple scales.

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A core set of claims advanced in the chapter is that the depth, scale and urgency of transformative change: (a) demand heightened attention to justice in biodiversity governance; (b) reinforce the need for understandings of justice that are multidimensional (encompassing just processes and recognition as well as distributively just outcomes); and (c) underscore the importance of ensuring justice for the most vulnerable and marginalized groups in processes of transformative change. These claims converge on the idea that transformative biodiversity governance entails a "just transformation" toward a more sustainable planet.

8.2 Theories and Norms of Justice and Equity in Biodiversity Governance

Why are justice and equity so important for biodiversity governance? A first rationale rests on the idea that justice is of intrinsic moral importance. As an essential foundation for sustaining human and nonhuman wellbeing, biodiversity could be seen as a prerequisite for achieving justice (Human Rights Council, 2017). Yet, societies have strong incentives – often but not always grounded in concerns for their own wellbeing – to exploit biodiversity rather than conserve it. Whatever combination of exploitation and conservation is pursued, its impacts are unevenly distributed across human and nonhuman communities, spaces and generations (Blythe et al., 2018; Howe et al., 2014; McShane et al., 2011). This recurrent imbalanced distribution of costs and benefits poses fundamental moral questions about what a just state of affairs is and who should be responsible for envisioning and achieving it.

A second rationale relies on the instrumental importance of justice for biodiversity governance, as in the claim that injustice is an indirect driver of biodiversity loss (IPBES, 2019). According to this view, if governance is just (or at least widely perceived to be so) it will produce better ecological outcomes (Martin et al., 2020). Evaluating both of these rationales requires clarifying how the terms "justice" and "equity" are used in theory and practice.

8.2.1 Theories of Justice, Equity and Biodiversity: A Brief Overview

The meanings of justice and equity are necessarily plural and contested (see Rawls, 1999; Sen, 2009; Shelton, 2007). In the literature reviewed in this chapter, justice, equity and fairness are frequently considered to be synonymous or interchangeable, and our analysis does not rely on drawing a clear-cut distinctions between these terms. However, theorists often see justice as a more stringent set of moral (and sometimes legal) responsibilities that social institutions owe to humans (and sometimes also to nonhumans) as a matter of right, whereas equity may refer to a wider notion of fair, proportionate or nonarbitrary treatment (see e.g. Armstrong, 2019). As outlined in later sections, applied definitions frequently depart from the theoretical foundations of these terms, and the term "equity" tends to be invoked in policy contexts and at project level more than "justice."

A range of theories and conceptions of justice have emerged that relate to biodiversity. These include environmental and ecological justice (Kopnina, 2016; Schlosberg, 2007),

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social-ecological justice (Gunnarsson-Östling and Svenfelt, 2018), multispecies justice (Celermajer et al., 2021), just conservation (Gavin et al., 2015; Martin, 2017), just sustainabilities (Agyeman et al., 2003), equitable sustainability (Leach et al., 2018) and planetary justice (Dryzek and Pickering, 2019; Kashwan et al., 2020). One could also refer to the idea of "biodiversity justice" (Godden and O'Connell, 2015) or "just biodiversity governance" (Adam, 2014). Each of these conceptualizations of justice varies in several respects.

First, theories vary depending on who or what are the subjects of justice or rights-holders (Martin et al., 2016). These are commonly disaggregated to include gender, socioeconomic, racial, ethnic or cultural differences, while taking account of intersectionality across these characteristics (Schlosberg and Carruthers, 2010). Conventional accounts of environmental justice tend to be anthropocentric, while ecological and social-ecological accounts recognize nonhumans (e.g. animals, plants or ecosystems) as subjects of justice (Schlosberg, 2007; Chapter 9). Second, the theories operate over different spatial, temporal and sectoral scales. Some see the state as the primary site of justice, while others foreground a global perspective or underscore the agency of local communities and institutions (Sikor and Newell, 2014). Some theories focus on duties toward those living now, while others emphasize intergenerational justice (Dryzek and Pickering, 2019). A range of theories – particularly those that call for the explicit adoption of critical, decolonial, feminist and other lenses – situate questions of justice and biodiversity within broader processes that continue to perpetuate injustice, such as colonial exploitation and gender inequality (Alvarez and Coolsaet, 2020; Elmhirst, 2011; Pellow, 2017).

Three core dimensions have gained prominence in environmental justice scholarship over the last two decades: distribution, procedure and recognition (Schlosberg, 2007, building on Fraser, 1995). Distributive justice is the most widely researched and commonly recognized dimension. It encompasses who receives the benefits and opportunities versus who bears the costs and risks of social cooperation (Walker, 2012). Theories vary considerably as to what kinds of principles should determine a just distribution, such as equality, need or aggregate social utility/wellbeing (Kaswan, 2020). Procedural justice engages with the processes by which decisions are made (Davoudi and Brooks, 2014; Dawson et al., 2018a). Recognition pertains to the status afforded to multiple social groups, worldviews and cultural values and identities, and to issues of self-respect and self-esteem (Martin et al., 2016; Whyte, 2011; 2018) Examples of how each dimension of justice applies to biodiversity governance are outlined in Table 8.1 . A final aspect of justice that is not always explicit in this tripartite categorization is corrective or remedial justice, which involves measures to correct or remedy unjust actions or omissions, such as sanctions for "ecocide" or violence against environmental defenders (Gonzalez, 2012; Whyte, 2011). Space constraints preclude a detailed discussion of this aspect, but related issues are discussed under distributive and procedural justice.

This chapter does not advocate any one of the conceptions of justice outlined above, but instead takes elements from each to adopt a pluralist approach spanning both social and ecological aspects, and all three dimensions of justice across multiple temporal, spatial and sectoral scales.

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Table 8.1 *Dimensions of justice in biodiversity governance*

Dimension of justice	Examples in biodiversity governance
Procedural justice	• Inclusion and representation in formal processes (e.g. CBD negotiations or government policy-making) or informal/customary institutions and interactions (e.g. meetings of IPLC)
	• Access to information and justice (e.g. judicial review of environmental decisions)
Recognition	• Acknowledgment of and respect for Indigenous and local knowledge, diverse worldviews and ways of valuing nature
	• Recognition of customary land rights
Distributive justice	• Measures to address distributional impacts of biodiversity loss or of biodiversity policies (e.g. through area-based measures or mainstreaming)
	• International finance for conservation and sustainable use
	• Equitable sharing of benefits from use of genetic resources

8.2.2 Norms of Justice and Equity in Global Biodiversity Governance

Debates about justice and equity – particularly between the Global South and North – have pervaded the politics of global biodiversity governance since its emergence (Broggiato et al., 2015; Swanson, 1999). Discussions on global environmental governance since the 1970s prompted the Global South to develop a set of common demands on environmental issues (Williams, 1993), including on what Christopher Stone (1996) called the "most difficult moral question" regarding the Convention: the distribution of costs associated with conserving biodiversity. Most of the world's biodiversity is located in nonindustrialized countries, which generally have more limited capacity to pay for conservation than industrialized countries (see also Section 8.5). As a result, conservation has increasingly shifted toward more "people-friendly" and decentralized interventions such as "integrated conservation and development projects," driven by the belief that poverty was the main cause of environmental degradation (Roe, 2008).

Against this political backdrop, norms of equity, rights and justice have gained traction in key documents and practices of global biodiversity governance.[1] The CBD and the UNFCCC – both of which were adopted at the 1992 Earth Summit – were among the first multilateral environmental agreements to explicitly integrate equity. The CBD's third objective is "the *fair* and *equitable* sharing of the benefits arising out of the utilization of genetic resources" (UN, 1992, Article 1; emphasis added). While *inter*generational equity (i.e. equity between generations) was foundational to the narrative of sustainable development in the 1987 Brundtland Report, the CBD and the UNFCCC raised the profile of *intra*generational equity (i.e. equity among groups within a single generation) on the international environmental agenda (Okereke, 2006). A comparison of official documents associated with each treaty body shows how references to equity in the CBD are far more common than references to equity in the UNFCCC or to justice in either treaty (see Figure 8.1).

[1] We define norms as "shared expectations about appropriate behavior held by a community of actors" (Finnemore, 1996: 22).

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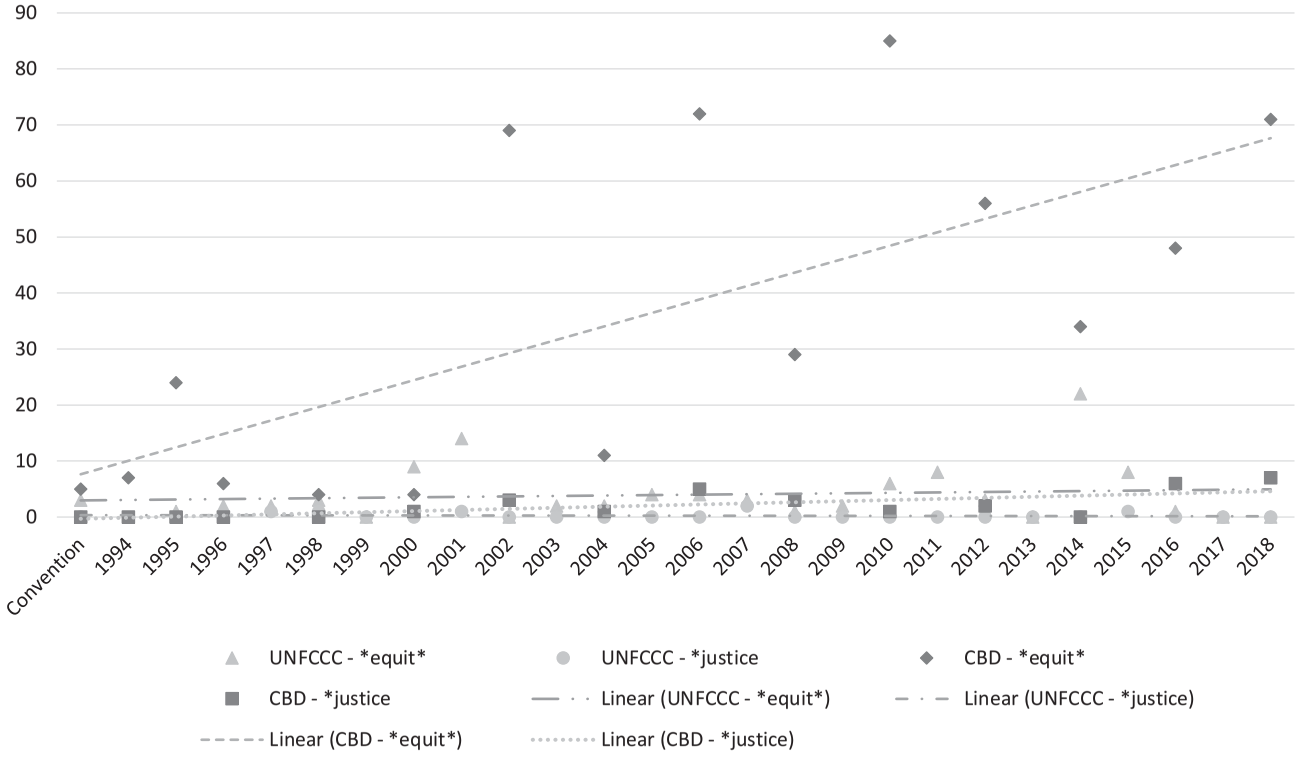

Figure 8.1 Frequency of references to equity and (in)justice in CBD and UNFCCC documents
Source: CBD and UNFCCC conventions and COP reports compiled for this chapter, excluding equity financing and names of organizations containing *equit* and/or *justice. The CBD COPs take place every other year. Peaks in CBD equity data generally coincide with heightened attention to equity in access and benefit-sharing, notably the Nagoya COP in 2010

This evidence reflects a broader observed tendency that equity is more commonly invoked than justice in international agreements (see also Okereke, 2008). In policy contexts, equity is often applied to specific policies or with a focus on a single dimension (most frequently distribution), allowing more politically sensitive issues such as historic land rights to be sidelined (Coolsaet et al., 2020).

Today, international policy norms on conservation cover most of the dimensions of justice introduced above (Dawson et al., 2018a; FAO, 2001, Article 1.1; Marion Suiseeya, 2017). In 2010, the CBD extended equity-related wording, which for a long time had been limited to access and benefit-sharing (ABS), to conservation efforts: Aichi Target 11 called for the conservation of biodiversity to take place through "effectively and equitably managed" protected areas (Zafra-Calvo et al., 2017).

Global norms entrenched in other international frameworks – especially ideas of rights – have played an increasingly important role in shaping debates about justice and equity in biodiversity governance (Coolsaet et al., 2020). Indigenous Peoples, for example, steward 85 percent of the world's remaining biodiversity, yet their ability to do so is threatened by weak and/or infringed political, economic and social rights (IPBES, 2019; Tauli-Corpuz, 2016). In recent years, the global Indigenous movement has worked to secure references to the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) in texts negotiated at the CBD and the UNFCCC as ways to recognize their rights to self-determination, but also to protect their ability to steward lands and forests critical for biodiversity conservation (Marion Suiseeya and Zanotti, 2019). Linking biodiversity to the human rights to life and health, adequate standards of living and nondiscrimination in the enjoyment of rights, the UN Special Rapporteur on Human Rights and the Environment recognized that "the full enjoyment of human rights … depends on biodiversity, and the degradation and loss of biodiversity undermine … human rights" (Human Rights Council, 2017: 3). These developments have been complemented by the institutionalization of procedural environmental rights – particularly in regional agreements such as the Aarhus Convention and the Escazú Agreement – such as the right to participate in environmental decision-making and the recognition of rights to a healthy environment in many national constitutions (Gellers, 2017).

Despite these advances, biodiversity continues to decline at unprecedented rates, giving rise to calls to transform existing governance systems (see e.g. IPBES, 2019). The section that follows highlights justice and equity considerations that need to be taken into account specifically when moving toward transformative governance of biodiversity.

8.3 Rethinking Justice and Equity in the Context of Transformative Governance: Toward Just Transformation

What does transformation mean for justice and equity in biodiversity governance? Adopting the definition of Chapter 1, transformative governance embraces the multiple enabling processes that facilitate "fundamental system-wide reorganisation" (IPBES, 2019).

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Transformative governance "seeks to achieve desired societal values" (Chaffin et al., 2016: 408; see also Chapters 1 and 4). However, determining what is desirable – including whether transformation is desirable at all – and how to achieve a desired transformation involves contestation over values, interests and worldviews. Indeed, rethinking core societal values can be seen as a constitutive feature of transformative governance (Chapters 1 and 4; IPBES, 2019). Questions about who should be involved in this contestation, how values should be rethought and who has the authority to make decisions underscore the political character of transformation (Blythe et al., 2018; Patterson et al., 2017), hence posing concerns of justice. Nevertheless, existing accounts of sustainability transformations have been criticized for their lack of attention to justice (Martin et al., 2020; Patterson et al., 2017). In contrast to more conventional or incremental approaches to biodiversity governance, the depth, scale and urgency of change associated with transformative biodiversity governance demand reflecting on its association with social and environmental justice.

First, transformative change requires *deep shifts* in existing patterns of production and consumption, disrupting inequalities of power that drive and arise from these patterns. Not only could misguided attempts at transformation result in an unjust redistribution of resources, but powerful vested interests may also resist transformative change and defend an unjust status quo. While transformative governance is often portrayed as universally beneficial, transformations inevitably produce winners and losers (Blythe et al., 2018; Morrison et al., 2017; Patterson et al., 2017). Even if the normative ideal of transformative governance entails justice (as stipulated in the Introduction), the implications of different policy options can be difficult to predict, and some forms of social transformation may in practice yield injustice, e.g. if the creation of protected areas deprives Indigenous peoples and local communities of access to their traditional lands (Chapters 2, 11, 12). Moreover, policy-makers and other powerful actors may manipulate discourses of transformation for unjust ends, for example to justify business as usual or to shift responsibility for behavioral change away from themselves and onto consumers or citizens (Blythe et al., 2018).

Second, the *geographic and temporal scale* of transformative change magnifies the justice challenges for transformative governance. Transformative change will require attention to the drivers of biodiversity loss emanating in one part of the world while affecting another (Liu et al., 2013; Chapters 1 and 4), e.g. where demand for beef or soy in Europe drives land clearing in the Amazon rainforest. Moreover, addressing transformative change over large geographic regions will inevitably need to deal with a tremendous diversity of meanings and claims of justice. Yet conventional understandings of social justice often center on relationships among participants in a domestic social contract and struggle to conceptualize relations of justice at a global level (Sikor and Newell, 2014). With regard to temporal scale, a strong argument for transformative biodiversity governance is that the continued loss of biodiversity, even if equitably distributed for present generations, will inevitably disadvantage future generations (Alvarez and Coolsaet, 2020). However, the costs of initiating transformative change rest initially on the present generation, raising questions of intergenerational equity (Martin et al., 2013).

Third, the *urgency* of transformative governance intensifies questions about the feasibility of pursuing justice. Invoking an ecological or climate emergency risks circumventing

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democratic safeguards and resulting in unjust reforms (Niemeyer, 2014). However, while halting biodiversity loss is long overdue, the urgency of the task does not make it impossible to consider the justice implications of critical decisions. Indeed, if hasty action results in further injustice, this is likely to damage public support for transformative governance and ultimately be counterproductive (Dryzek and Pickering, 2019).

The remaining sections explore in more depth how questions of justice and equity can be addressed in specific areas of transformative governance. Our discussion builds on ideas of a "just transition" to more sustainable societies. While the term has become prominent in climate policy – underscoring that the transition to renewable energy should not disproportionately affect groups such as coal miners or low-income electricity consumers (Stevis, 2020) – scholars and activists have applied the term to environmental justice more broadly (Ciplet and Harrison, 2020). Thus, one could think of a just transition (Newell and Mulvaney, 2013; Swilling, 2019) or even a "just transformation" (Bennett et al., 2019; Schlosberg et al., 2017) of biodiversity governance.[2] The idea of just transformation speaks to the notion that transformative governance must be integrative and inclusive (Chapter 1), and calls attention to the interests of disadvantaged or marginalized groups in the context of transformation, including nonhuman species and ecosystems. One might object that, since the ideal of transformative governance necessarily entails justice, the idea of "just transformation" is tautologous. We believe, however, that processes of *transformation* (as distinct from *transformative change*) may be just or unjust (see also Bennett et al., 2019). Moreover, considerations of justice can easily be overshadowed by the pursuit of transformations toward environmental sustainability; hence the need to foreground a *just* transformation (Martin et al., 2020).

8.4 How Should Decision-Making Processes Be Structured?

Transformative change demands a fundamental reordering and rescaling of how problems are defined, solutions are deliberated and decisions are reached. One of the five key ingredients of transformative governance set out in Chapter 1 is *inclusive* governance ("governance approaches through stakeholder engagement, including Indigenous Peoples and Local Communities, in decision-making processes." IPBES, 2019: 894). Transformative governance needs to be inclusive in order "to empower . . . those whose interests are currently not being met and who represent values that constitute transformative change toward sustainability" (Chapter 1). Similarly, Chapter 1 stipulates that transformative governance needs to be *transdisciplinary*, "in ways that recognize different knowledge systems." Attention to inclusive and informed governance highlights the importance of procedural justice and recognition. At the same time, a just transformation further demands greater attention to the underlying forces that structure and constitute decision-making landscapes.

[2] Bennett et al. (2019: 5) define just transformations as "radical shifts in social–ecological system configurations through forced, emergent or deliberate processes that produce balanced and beneficial outcomes for both social justice and environmental sustainability." On the distinction between transition and transformation, see Chapters 1 and 4.

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Relative to other environmental problems, the CBD is generally considered to be a rather inclusive arena (Coolsaet and Pitseys, 2015; Cordonier Segger and Phillips, 2015), even though debates on these questions are ongoing (Reimerson, 2013). At a local level, however, biodiversity governance most commonly remains in the control of external actors, both public and private, through management regimes that seek to amend local practices and override customary institutions (Coolsaet et al., 2020). Biodiversity conservation initiatives that fail to include affected communities in decision-making often fail to achieve their conservation objectives (Bell and Carrick, 2017; Bennett and Satterfield, 2018; Dawson et al., 2018b). Unjust decision-making processes can spark new conflicts (Paavola, 2004), compound injustices (Sikor, 2013), foment distrust of the decision-making process and its proponents (Brechin et al., 2003; Hotes and Opgenoorth, 2014), and undermine broader biodiversity governance objectives (Martin, 2017).

Drawing on a growing body of literature examining concepts and practices for ensuring broad representation and inclusive decision-making (see e.g. Walker, 2012), we direct attention to three key questions: Who should be included in decision-making processes? On what terms should decision-making processes take place? At what point do requirements of recognition and procedural justice begin?

8.4.1 Who Should Be Included in Decision-Making Processes?

At a minimum, procedural justice requires the inclusion and representation of affected parties in decision-making processes (Schlosberg, 2007). The authority to decide who should be included typically rests with powerful actors (e.g. governments or intergovernmental organizations) who may misuse this authority to entrench existing inequalities of power. However, that authority can be subjected to scrutiny and challenge by social movements or other actors. The task of assessing who counts as affected – and determining what sorts of processes justice requires – becomes even more complex in the context of transformative biodiversity governance, which may both extend and amplify the effects of ecological and policy change across different social groups.

Scholars and practitioners broadly agree that affected parties include those groups who are vulnerable to biodiversity loss and/or who might be adversely impacted by conservation policies (Martin et al., 2013). These groups include IPLC and other marginalized groups with land-, water- or sea-based identities and lifeways. Attending to how demographic features, such as gender, age, race, class and ethnicity, shape different groups' experiences with biodiversity governance is critical for understanding who affected parties are and how they are differentially affected (IPBES, 2019; Malin and Ryder, 2018; Marion Suiseeya and Zanotti, 2019). Efforts to address distributive injustice or lack of recognition may be undermined when those most affected are not part of decision-making processes (Marion Suiseeya, 2016). More contentious is how other actors affected by conservation policy – such as corporations whose practices contribute to biodiversity loss – should be included in decision-making processes in ways that do not reinforce or exacerbate asymmetries of power (Dempsey, 2016).

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8.4.2 On What Terms Should Decision-Making Processes Take Place?

Procedural justice requires attention to at least four characteristics of affected actors' roles in decision-making processes: (1) physical *presence* of affected actors or their representatives in decision-making settings; (2) *access*, meaning the authority to be an active participant in decision-making processes rather than only an observer; (3) capacity to *leverage* access to exercise agency (e.g. the ability to initiate a proposal or make a statement without being first invited to do so) and (4) capacity to *influence* decision-making processes (Marion Suiseeya and Zanotti, 2019; Witter et al., 2015). Numerous studies have shown that presence and access alone are insufficient for procedural justice (Cooke and Kothari, 2001; Holland, 2017).

The CBD has been a leader among multilateral treaty bodies in the inclusion of IPLC in its decision-making processes (Jones-Walters and Çil, 2011). Unlike the UNFCCC, which severely limits how nonstate actors can directly engage in their proceedings, the CBD moves beyond presence as a measure of inclusion. For example, representatives from the IPLC constituency colead negotiations on issues that have direct implications for the wellbeing and lifeways of Indigenous peoples, such as the Convention's Working Group on Article 8(j) (which deals with traditional knowledge, innovations and practices) and related provisions. Indigenous peoples have similarly forged new ground in intergovernmental scientific bodies such as IPBES by securing formal mechanisms for integrating diverse knowledge and value systems into its processes (Tengö et al., 2017).

Procedural justice also requires attending to power inequalities and political representation. Uneven power relations – such as states' control over multilateral governance processes or the privileged access of some stakeholders to the ear of government – affect the ability of actors to contribute to decision-making processes (Schroeder, 2010). Tools such as Free, Prior and Informed Consent (FPIC) show how institutions can help to address power imbalances and dismantle barriers to direct engagement. If fully implemented, FPIC creates a formalized channel for marginalized groups to leverage their power by requiring that affected parties give consent to receiving biodiversity governance initiatives in their communities (Colchester and Ferrari, 2007).

In practice it is not feasible for everyone affected to directly engage in decision-making processes; all the more so in deliberation at a global level that affects billions of people. Not all actors may have the financial, linguistic, physical or social capabilities to participate directly (Reimerson, 2013). Where feasible, actors who cannot participate directly should be able to select their own representatives. In the case of nonhuman subjects (e.g. animals, plants and ecosystems), which cannot select humans to represent them, options include legally appointed custodians, or nongovernmental organizations or experts working on conservation or animal welfare and rights. Similarly, custodians may be formally appointed to represent future generations (Dryzek and Pickering, 2019; Schlosberg, 2007).

8.4.3 When Do Requirements of Recognition and Procedural Justice Begin?

Although most studies of procedural justice focus on collective decision-making processes, those processes only begin following the identification of a problem or issue. Public policy

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and political ecology scholars have demonstrated the extraordinary power held by those who are able to define problems and set agendas (Bardach and Patashnik, 2019; Corson et al., 2014) and the extended effects of agendas that often carry forward beyond the initial decision-making process (Hughes and Vadrot, 2019; MacDonald and Corson, 2012). The resulting problem definitions, agendas and venues influence which actors and issues engage and are privileged in the process. Attending to the ways in which different power hierarchies and inequalities inform the phase before decision-making on a given problem begins (the "decision-impetus phase") is critical for advancing procedural justice (Marion Suiseeya, 2020).

One example of the importance of the decision-impetus phase is the problem of biodiversity itself. The framing of the biodiversity problem was initially driven largely by conservation biologists (Haila, 2017; Takacs, 1996). The idea of biodiversity subsequently gained wider acceptance but still carries certain connotations that affect power relations and may not resonate with certain groups, e.g. seeing biodiversity loss as the depletion of a resource rather than as the disruption of a harmonious relationship between humans and nonhumans (see Chapter 9; Martin et al., 2013). This example highlights that while inclusion of affected actors in established decision-making processes is a critical element of transformative governance, just transformation requires earlier and broader attention to procedural justice and recognition.

8.5 How Should Resources Be Mobilized and Allocated?

While transformative governance is likely to yield net economic benefits over the longer term, it will require large-scale mobilization of financial resources and a shift away from financing activities that harm biodiversity (CBD, 2020; Chaffin et al., 2016; McCarthy et al., 2012; Chapter 6). However, given vast disparities in incomes worldwide, capacity to mobilize resources domestically varies widely. Justice requires that higher-capacity countries support those with more limited capacity (Armstrong, 2019).

The CBD obliges developed countries to "provide new and additional financial resources" to enable developing countries to meet their obligations under the Convention (UN, 1992: Article 20.2). Subsequently, Aichi Target 20 aimed for the mobilization of financial resources to "increase substantially from the current levels." A high-level panel of the CBD (2012) estimated the cost of meeting the Aichi targets globally at US$150–$440 billion per year, and it is likely that the cost of meeting more ambitious post-2020 targets will be at least within this range (CBD, 2020). Accordingly, resource mobilization has emerged as a key priority for the post-2020 framework.

In this section, we focus on two key questions that a just scale-up of resources for transformative biodiversity governance must address:

1. How should the global effort of mobilizing resources be shared among nation-states and nonstate actors?
2. How should resources be allocated across countries and communities?

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Both questions raise complex issues of distributive justice but have been addressed far less in the literature on biodiversity finance than in literature on development assistance and climate finance. The discussion below draws on relevant findings from these other bodies of work.

8.5.1 Effort-Sharing

Recognizing the differentiated capabilities of its parties, the CBD notes "the importance of burden-sharing" among contributing parties in providing finance for developing countries (Article 20.2). This leaves open the question of which actors (whether states, international organizations, civil society or private actors) should contribute the most toward a scaled-up international financing effort: is it those who have contributed the most to biodiversity loss, those with the greatest capacity to mobilize resources or those who stand to gain the most (economically or otherwise) from conservation? These three principles – sometimes referred to as the contributor/polluter pays principle, the capacity to pay principle and the beneficiary pays principle – have been widely debated in the literature on climate justice (see e.g. Dellink et al., 2009; Page, 2011) but have so far received only modest attention in the literature on biodiversity finance (for notable contributions, see Armstrong, 2019; Balmford and Whitten, 2003).

While some argue that the extent to which actors will benefit from conservation should be the primary factor in distributing costs (Balmford and Whitten, 2003), others argue that a pluralist approach combining all three principles is necessary, not least because those who stand to benefit most – e.g. forest communities – may have little capacity to pay for additional conservation efforts, even though they are often the most active participants in existing conservation practices (Armstrong, 2019). Moreover, it would be unfair to expect potential beneficiaries to pay the most when others (e.g. consumers in other countries) may be driving biodiversity loss in those areas despite the availability of less destructive alternatives (Dowie, 2011).

To date, parties to the CBD have not been able to agree on how to translate principles of equity into transparent, quantified effort-sharing measures. Sharing the overall conservation financing effort typically operates more informally.[3] However, improved transparency about how much parties are providing could help to clarify which parties are fulfilling their obligations, and inclusive deliberation could help to build shared understandings about broad parameters for effort-sharing (Pickering et al., 2015).

8.5.2 Allocation

Evidence indicates that conservation spending is more effective in lower-income countries than higher-income ones (Waldron et al., 2017), suggesting potential synergies between just allocation and effective ecological outcomes. However, when it comes to the question of

[3] While the Global Environment Facility (GEF) has an established system of burden-sharing, this is not based on a strict formula derived from equity principles.

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allocating finance *among* lower-income countries, justice and effectiveness could pull in different directions.

Allocation according to need is a prominent justice-based principle for determining distribution, but in practice it competes with other principles of allocation. Existing patterns of allocation for environmental aid reflect a mix of donors' interests (e.g. supporting neighboring countries or trade partners) and equity considerations such as recipients' needs (e.g. national income and extent of the environmental problem) (Hicks et al., 2008). Miller et al. (2013) find that a country's biodiversity need (measured using indicators such as the number of threatened species or species richness) and quality of governance are strong predictors of the level of biodiversity aid it receives; income is negatively but weakly correlated with levels of biodiversity aid.

Trade-offs may arise in allocation decisions because the countries with the greatest levels of need may not be the ones with the greatest capacity to manage funds effectively, for example where low-income status coincides with limited institutional capacity. Managing these trade-offs is further complicated by different interpretations of need (e.g. degree of risk of biodiversity loss or capacity for domestic resource mobilization: Miller et al., 2013).

A massive scale-up of biodiversity finance would place considerable stress on existing institutional capacity to manage resources, particularly in countries with more constrained capacity (Presbitero, 2016). While this needs to be taken into account in efforts to maximize effective use of biodiversity finance, there is a risk that low-income countries could be further marginalized if the lion's share of funding goes to middle-income countries with stronger institutional capacity (Arndt and Tarp, 2017). Demand-driven mechanisms for allocating biodiversity finance may help to manage (if not fully resolve) these trade-offs, as recipient countries' level of demand for finance may reflect a mix of need and institutional capacity. Enhancing recipient countries' control over subnational allocation of biodiversity finance could enhance the effectiveness of implementation as well as furthering principles of procedural justice (Duus-Otterström, 2015).

8.6 How Can Transformative Governance Be Implemented Equitably?

In this section we discuss concerns arising for two prominent strategies that aim to address the drivers of biodiversity loss: (1) scaling up area-based conservation, and (2) mainstreaming biodiversity considerations across all sectors of decision-making.

8.6.1 Equitably Scaling Up Area-Based Conservation Initiatives

There is considerable debate regarding the expansion of area-based conservation and visions to achieve this, including whether expansion should comprise protected areas or "other effective area-based conservation measures" (OECMs) (Büscher et al., 2017; Dudley et al., 2018; Chapters 11 and 12). Here we focus on two key questions of justice that arise in scaling up conserved areas: (1) redistributive effects and (2) questions of procedural justice and recognition in decision-making.

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Efforts to expand protected areas commonly curtail existing patterns of resource use in those areas. Recent pledges by many world leaders involve expanding protected areas to cover 30 percent of the Earth's land and ocean surface by 2030. Proposals to expand this to 50 percent – e.g. the Half Earth Project (inspired by Wilson, 2016) and Nature Needs Half (Kopnina et al., 2018) – could impact as many as one billion people (Schleicher et al., 2019). Such efforts could meet considerable political resistance from rural populations, particularly if they ignore the legacy of colonial land reallocations, displacement of IPLC and "green grabs" (Büscher et al., 2017). Equally, resistance may emerge from powerful groups (e.g. resource extraction or infrastructure industries) that are exploiting areas slated for protection. Although the redistributive effects of protected area expansion are often understood in human terms, an ecological justice perspective – which extends compassion, caring 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 (Kopnina et al., 2018). A perspective on justice that encompasses both human and nonhuman concerns could highlight possible areas of convergence between ecocentric conservationists and social justice activists. In the Amazon, for example, coalitions have formed between conservation biologists and social scientists, or between grassroots popular movements and environmental organizations, that have resulted in the creation of protected areas that combine zones for sustainable use (encompassing subsistence or commercial exploitation) and conservation (Inoue and Franchini, 2020). The more ambitious the protected area target, the more challenging it is likely to be to achieve such convergence.

Protected area expansion raises complex governance issues relating to rights, access and control, such that the question of *how* protected areas are managed is as important as *what* is to be protected (Büscher et al., 2017; Coolsaet et al., 2020). In implementing international commitments on protected areas (such as Aichi Target 11), governments have tended to focus on the "headline" numbers of how much area is protected, with less emphasis on qualitative factors such as Aichi Target 11's call for protected areas and OECMs to be "equitably managed" (CBD, 2010). This is partly due to practical and conceptual difficulties of measuring equity. Some impact assessment and evaluation tools (see e.g. Schreckenberg et al., 2016; Zafra-Calvo et al., 2017) and conceptual frameworks (Pascual et al., 2017) incorporating the three dimensions of justice have been developed and adopted by the CBD as voluntary guidance (CBD, 2018). However, barriers remain both to the adoption of these tools and to the achievement of equitable management, particularly where national legal frameworks do not recognize customary land rights.

International recognition of the global network of Indigenous and community conserved areas (ICCAs), along with evidence of their mutual benefits for human wellbeing and nature, offers an example of an emergent transformative change in biodiversity governance (Armitage et al., 2020; IPBES, 2019: chapter 6: 61; Tran et al., 2020). Establishment of an ICCA or "territory of life" requires the autonomy of local people to govern and manage their territories. In many instances, this

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necessitates an overhaul of land and other laws or policies to transfer power to local institutions, in addition to redressing discriminatory social and political norms. Thus, while a transformative scale-up of area-based conservation will pose significant challenges to existing power relations, it also offers an opportunity to redress a range of injustices (Tauli-Corpuz et al., 2020).

8.6.2 Justice and Equity in Mainstreaming Transformative Governance

Transformative governance beyond protected areas remains essential, as the main direct and indirect drivers of biodiversity loss emanate from outside these areas (Chapter 1; Büscher et al., 2017). Here we address risks of injustice when conservation interventions adversely affect marginalized groups. In implementing biodiversity governance, just transformation requires at a minimum (a) careful assessment to identify implementation options that avoid or minimize adverse effects on marginalized groups; and (b) where adverse effects cannot reasonably be avoided, incorporating additional measures to ensure that the wellbeing of these groups is protected.[4] As outlined in the Introduction, injustice may arise not only from practices that adversely impact biodiversity but also from measures to address biodiversity loss.

Taking the example of subsidies harmful to biodiversity (which are addressed in Aichi Target 3), some subsidies (e.g. for fossil fuel extraction) may benefit wealthy interests at the expense of disadvantaged groups, so dismantling them could yield a double dividend for biodiversity and social justice. However, other subsidies (e.g. for fuel or fertilizer) may be designed to benefit disadvantaged groups, so dismantling those subsidies may adversely affect those groups. More broadly, policies that seek to shift people's livelihoods away from practices that degrade biodiversity can exacerbate inequalities of gender, education, ethnicity or socioeconomic status (Bidaud et al., 2017; Blythe et al., 2018). While in some cases unequal impacts can be avoided by choosing an alternative option, in other cases there may be no reasonable alternatives, in which case supporting measures are required to mitigate those impacts.

We highlight four types of additional measures: monetary compensation, localized in-kind support for livelihoods, broader social protection mechanisms and a wider-ranging reconfiguration of social and political relations.

First, economic theories of reform often emphasize monetary transfers to alleviate or compensate for adverse impacts (or conversely monetary incentives to adopt sustainable practices). International biodiversity finance, as outlined in Section 8.5, may help to reduce the risk that conservation efforts will impede the ability of developing countries to address other pressing development priorities. Similarly, payment for ecosystem services (PES) initiatives may enable communities to participate in conservation without endangering their livelihoods (IPBES, 2019). However, there remains the risk that a compensatory perspective will fail to recognize the

[4] Note that these principles could also apply to area-based conservation measures.

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incommensurability of different values attached to nature, the agency of affected groups and other options for enhancing their wellbeing (Lliso et al., 2020).

A second option is localized support for livelihoods, such as through integrated conservation and development projects (ICDPs). Most case studies report that local integrated approaches to conservation have yielded very little benefit to people, even in cases that led to more effective conservation (Lund and Saito-Jensen, 2013; Twinamatsiko et al., 2014). The emerging understanding from this experience is that conservation effectiveness should be conceived as linked to social justice, rather than to a narrow economic understanding of development. In other words, for biodiversity governance to be transformative it is necessary to shift from an "integrated conservation and development" model to one of "integrated conservation and justice" (Martin, 2017; Vucetich et al., 2018). This would include, for example, stronger recognition of local visions of nature in decision-making processes and support for local environmental stewardship instead of separating local livelihoods from ecosystems or resources of conservation value.

The need to scale up and mainstream biodiversity objectives beyond individual projects points to the importance of exploring a third kind of measure: broad-based social protection mechanisms. These could take the form of unemployment insurance, welfare payments or cash transfers for low-income families (e.g. the Bolsa Floresta program in Brazil), universal basic income or other instruments (de Haan, 2014). Unlike project-specific support, these measures would help to safeguard communities against a wider range of risks to their wellbeing. However, broader redistributive measures may be difficult to implement effectively – particularly in low-income countries – and may need to be supplemented by international support.

Finally, a fourth strategy is to combine conservation measures with broader systemic reform that advances all dimensions of justice, particularly for marginalized groups and environment and human rights defenders (Bille Larsen et al., 2021; Scheidel et al., 2020). This could occur through formal recognition of the rights of IPLC (e.g. through constitutional recognition, parliamentary representation or treaty processes), strengthening social safeguards in conservation policy (to address concerns of displacement and impacts on livelihoods), reform of land tenure legislation, or other measures (Tran et al., 2020). This fourth strategy underscores the importance of thinking well beyond the conventional policy toolkit of financial transfers if just transformation is to be achieved.

8.7 Policy Implications

Our review confirms that action is required at multiple levels to reinterpret and uphold justice in transformative biodiversity governance across diverse geographic, temporal and spatial scales. Key areas for policy innovation emerging from the preceding sections that could enhance justice in transformative governance – especially through the implementation of the Global Biodiversity Framework – are outlined in Box 8.1.

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Box 8.1: Policy options for advancing justice in transformative biodiversity governance

- **Norm development and fulfillment:** Further development of international norms of equity and justice in global sustainability governance could take the form of new norms (e.g. just biodiversity governance) or further diffusion or expansion of existing norms (e.g. the application of human rights to biodiversity governance, or entrenchment of the principle of equity across all three objectives of the CBD). However, norm development by itself is insufficient: indeed, it could be argued that the CBD already has a range of well-developed norms to work with, and that the key issue is *compliance* with or *fulfillment* of those norms – an issue that we address in the subsequent points in this list.
- **Policy integration:** There is a need for stronger integration of justice concerns in biodiversity policy-making, policy implementation and policy review at all levels of governance. One option for doing so would be to build on the Sustainable Development Goals (SDGs) framework – which includes goals on biodiversity and on social and economic equity, along with other socioeconomic objectives – and associated tools for mapping and managing synergies and trade-offs across goals (e.g. ICSU, 2017).
- **Decision-making:** Greater attention to how existing approaches to decision-making can exacerbate injustices could be coupled with further entrenchment of procedural rights (including through the Aarhus Convention and related international agreements), practices and measures (e.g. FPIC) to ensure that marginalized groups can shape and influence collective decision-making.
- **Resource mobilization:** This could take the form of 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 long-discussed idea of a multilateral benefit-sharing mechanism (Nagoya Protocol, Article 10; see Chapters 6, 10 and 15) – along with efforts to build shared understandings about equitable effort-sharing and allocation of resources.
- **Implementation:** 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 ICCAs and other measures to remedy unjust asymmetries of power in political systems (e.g. land reform and recognition of Indigenous rights).
- **Monitoring, evaluation and accountability:** Meaningful mechanisms for monitoring and evaluating equity in conservation, sustainable use and benefit-sharing need to be developed, incorporated into decision-making, and used in reporting on national and collective performance under the post-2020 framework. Existing voluntary guidance for assessing equity in protected area management could be implemented as standard, used to hold decision-makers accountable and extended to other areas of biodiversity governance. Stronger measures are required to ensure that policy-makers and other actors are held accountable for their commitments to transformative change, and that legal sanctions are strengthened for those who persecute environmental defenders or wantonly destroy biodiversity on a large scale.

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8.8 Conclusion

This chapter has demonstrated that in both conceptualizing and implementing transformative biodiversity governance, issues of justice need urgent attention. Justice is at the core of how to envision and achieve transformative change, and how to maintain a desired future state. Failure to take account of preexisting unjust conditions – or the potential for misguided governance strategies to create further injustice – may not only result in morally reprehensible decisions but may also provoke resistance that ultimately blocks transformative change and results in a failure to address the underlying causes of biodiversity loss. Transformative governance requires not only *inclusive* governance but a broader *integrative* vision of justice and sustainability, exemplified by the idea of just transformation.

The literature reviewed in this chapter emphasizes the need for a multidimensional view of justice – comprising not only distributive justice but also procedural justice and recognition – as well as attention to global, intergenerational and interspecies aspects, while also remaining cognizant of diverse social values and local circumstances. The depth, scale and urgency of transformative change underscore the importance of a multidimensional perspective. Achieving a simultaneous transformation toward justice and sustainability remains a daunting challenge replete with complex trade-offs. Nevertheless, it remains vital to strive for a just transformation in which everyone – especially those most often excluded in society – is able to participate in, influence and benefit from more just and sustainable biodiversity governance.

References

Adam, R. (2014). *Elephant treaties: The colonial legacy of the biodiversity crisis*. Hanover; London: University Press of New England.

Agyeman, J., Bullard, R. D., and Evans, B. (Eds.). (2003). *Just sustainabilities: Development in an unequal world*. Cambridge, MA: MIT Press.

Alvarez, L., and Coolsaet, B. (2020). Decolonising environmental justice studies: A Latin-American perspective. *Capitalism Nature Socialism* 31, 50–69.

Armitage, D., Mbatha, P., Muhl, E. K., Rice, W., and Sowman, M. (2020). Governance principles for community-centered conservation in the post-2020 global biodiversity framework. *Conservation Science and Practice* 2, e160.

Armstrong, C. (2019). Sharing conservation burdens fairly. *Conservation Biology* 33, 554–560.

Arndt, C., and Tarp, F. (2017). Aid, environment and climate change. *Review of Development Economics* 21, 285–303.

Balmford, A., and Whitten, T. (2003). Who should pay for tropical conservation, and how could the costs be met? *Oryx* 37, 238–250.

Bardach, E., and Patashnik, E.M. (2019). *A practical guide for policy analysis: The eightfold path to more effective problem solving*: Thousand Oaks, CA:CQ Press.

Bell, D., and Carrick, J. (2017). Procedural environmental justice. In: *The Routledge Handbook of Environmental Justice*. R. Holifield, J. Chakraborty and G. Walker (Eds.), pp. 101–112. Abingdon: Routledge.

Bennett, N. J., Blythe, J., Cisneros-Montemayor, A. M., Singh, G. G., and Sumaila, U. R. (2019). Just transformations to sustainability. *Sustainability* 11(14), 3881.

Bennett, N. J., and Satterfield, T. (2018). Environmental governance: A practical framework to guide design, evaluation, and analysis. *Conservation Letters* 11, e12600.

Bidaud, C., Schreckenberg, K., Rabeharison, M., et al. (2017). The sweet and the bitter: Intertwined positive and negative social impacts of a biodiversity offset. *Conservation and Society* 15, 1–13.

Published online by Cambridge University Press

Bille Larsen, P., Le Billon, P., Menton, M., et al. (2021). Understanding and responding to the environmental human rights defenders crisis: The case for conservation action. *Conservation Letters* 14, e12777.

Blythe, J., Silver, J., Evans, L., et al. (2018). The dark side of transformation: Latent risks in contemporary sustainability discourse. *Antipode* 50, 1206–1223.

Brechin, S. R., Fortwangler, C. L., Wilshusen, P. R., and West, P. C. (2003). *Contested nature: Promoting international biodiversity with social justice in the twenty-first century.* Albany: SUNY Press.

Broggiato, A., Dedeurwaerdere, T., Batur, F., and Coolsaet, B. (2015). Access benefit-sharing and the Nagoya Protocol: The confluence of abiding legal doctrines. In: *Implementing the Nagoya Protocol. Comparing Access and Benefit-sharing Regimes in Europe*. B. Coolsaet, F. Batur, A. Broggiato, J. Pitseyes and T. Dedeurwaerdere (Eds.), pp. 1–29. Leiden: Brill/Martinus Nijhoff

Büscher, B., Fletcher, R., Brockington, D., et al. (2017). Half-Earth or Whole Earth? Radical ideas for conservation, and their implications. *Oryx* 51, 407–410.

CBD. (2010). The strategic plan for biodiversity 2011–2020 and the Aichi Biodiversity Targets. Decision X/2. UNEP/CBD/COP/DEC/X/2 (October 29, 2010).

(2018). Protected areas and other effective area-based conservation measures. Decision adopted by the Conference of the Parties to the Convention on Biological Diversity. CBD/COP/DEC/14/8 (November 30, 2018).

(2020). 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 (June 18, 2020).

Celermajer, D., Schlosberg, D., Rickards, L., et al. (2021). Multispecies justice: Theories, challenges, and a research agenda for environmental politics. *Environmental Politics* 30, 119–140.

Chaffin, B. C., Garmestani, A. S., Gunderson, L. H., et al. (2016). Transformative environmental governance. *Annual Review of Environment and Resources* 41, 399–423.

Ciplet, D., and Harrison, J. L. (2020). Transition tensions: Mapping conflicts in movements for a just and sustainable transition. *Environmental Politics* 29, 435–456. DOI: 10.1080/09644016.2019.1595883

Colchester, M., and Ferrari, M. F. (2007). *Making FPIC–free, prior and informed consent–work: Challenges and prospects for indigenous peoples*. Moreton-in-Marsh: Forest Peoples Programme. Available from https://bit.ly/3HiV2rt.

Cooke, B., and Kothari, U. (2001). *Participation: The new tyranny?* London; New York: Zed Books.

Coolsaet, B., Dawson, N., Rabitz, F., and Lovera, S. (2020). Access and allocation in global biodiversity governance: A review. *International Environmental Agreements: Politics, Law and Economics* 20, 359–375.

Coolsaet, B., and Pitseys, J. (2015). Fair and equitable negotiations? African influence and the international access and benefit-sharing regime. *Global Environmental Politics* 15, 38–56.

Cordonier Segger, M. C., and Phillips, F. K. (2015). Indigenous traditional knowledge for sustainable development: The biodiversity convention and plant treaty regimes. *Journal of Forest Research* 20, 430–437.

Corson, C., Gruby, R., Witter, R., et al. (2014). Everyone's solution? Defining and redefining protected areas at the convention on biological diversity. *Conservation and Society* 12, 190–202.

Davoudi, S., and Brooks, E. (2014). When does unequal become unfair? Judging claims of environmental injustice. *Environment and Planning A* 46, 2686–2702.

Dawson, N., Coolsaet, B., and Martin, A. (2018a). Justice and equity: Emerging research and policy approaches to address ecosystem service trade-offs. In: *Ecosystem services and poverty alleviation. trade-offs and governance*. K. Schreckenberg, G. Mace and M. Poudyal (Eds.), pp. 22–38. London: Routledge.

Dawson, N. M., Martin, A., and Danielsen, F. (2018b). Assessing equity in protected area governance: Approaches to promote just and effective conservation. *Conservation Letters* 11, e12388. DOI: 10.1111/conl.12388

Published online by Cambridge University Press

de Haan, A. (2014). The rise of social protection in development: Progress, pitfalls and politics. *European Journal of Development Research* 26, 311–321.
Dellink, R., Den Elzen, M., Aiking, H., et al. (2009). Sharing the burden of financing adaptation to climate change. *Global Environmental Change* 19, 411–421.
Dempsey, J. (2016). *Enterprising nature: Economics, markets, and finance in global biodiversity politics*. Chichester, UK: Wiley.
Dowie, M. (2011). *Conservation refugees: The hundred-year conflict between global conservation and native peoples*. Cambridge, MA: MIT Press.
Dryzek, J. S., and Pickering, J. (2019). *The politics of the Anthropocene*. Oxford: Oxford University Press.
Dudley, N., Jonas, H., Nelson, F., et al. (2018). The essential role of other effective area-based conservation measures in achieving big bold conservation targets. *Global Ecology and Conservation* 15, e00424.
Duus-Otterström, G. (2015). Allocating climate adaptation finance: Examining three ethical arguments for recipient control. *International Environmental Agreements: Politics, Law and Economics* 16, 655–670.
Elmhirst, R. (2011). Introducing new feminist political ecologies. *Geoforum* 42, 129–132.
FAO. (2001). *International Treaty on Plant Genetic Resources for Food and Agriculture*. Rome: Food and Agriculture Organization of the United Nations. https://www.fao.org/3/i0510e/i0510e.pdf
Finnemore, M. (1996). *National interests in international society*. Ithaca, NY: Cornell University Press.
Fraser, N. (1995). From redistribution to recognition? Dilemmas of justice in a post-socialist age. *New Left Review* 212, 68–93.
Gavin, M. C., McCarter, J., Mead, A., et al. (2015). Defining biocultural approaches to conservation. *Trends in Ecology & Evolution* 30, 140–145.
Gellers, J. C. (2017). *The global emergence of constitutional environmental rights*. London: Routledge.
Godden, L., and O'Connell, E. (2015). Biodiversity justice in a climate change world: Offsetting the future. In: *The Search for Environmental Justice*. P. Martin, S. Z. Bigdeli, T. Daya-Winterbottom, W. du Plessis and A. Kennedy (Eds.), pp. 62–82. Cheltenham: Edward Elgar.
Gonzalez, C. G. (2012). Environmental justice and international environmental law. In: *The Routledge handbook of international environmental law*. E. J. Techera (Ed.), pp. 107–128. London: Routledge.
Gunnarsson-Östling, U., and Svenfelt, A. (2018). Sustainability discourses and justice: Towards social-ecological justice. In: *The Routledge handbook of environmental justice*. R.Holifield, J. Chakraborty and G. Walker (Eds.), pp. 160–171. Abingdon: Routledge.
Haila, Y. (2017). Biodiversity: Increasing the political clout of nature conservation. In: *Conceptual innovation in environmental policy*. J. Meadowcroft and D. J. Fiorino (Eds.), pp. 207–232. Cambridge, MA: MIT Press.
Hicks, R. L., Parks, B. C., Timmons Roberts, J., and Tierney, M. J. (2008). *Greening aid: Understanding the environmental impact of development assistance*. Oxford: Oxford University Press.
Holland, B. (2017). Procedural justice in local climate adaptation: Political capabilities and transformational change. *Environmental Politics* 26, 391–412. DOI: 10.1080/09644016.2017.1287625
Holland, T. G., Peterson, G. D., and Gonzalez, A. (2009). A cross-national analysis of how economic inequality predicts biodiversity loss. *Conservation Biology* 23, 1304–1313.
Hotes, S., and Opgenoorth, L. (2014). Trust and control at the science–policy interface in IPBES. *BioScience* 64, 277–278.
Howe, C., Suich, H., Vira, B., and Mace, G. M. (2014). Creating win-wins from trade-offs? Ecosystem services for human well-being: A meta-analysis of ecosystem service trade-offs and synergies in the real world. *Global Environmental Change* 28, 263–275.
Hughes, H., and Vadrot, A. B. M. (2019). Weighting the world: IPBES and the struggle over biocultural diversity. *Global Environmental Politics* 19, 14–37.
Human Rights Council. (2017). Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment. A/HRC/34/49 (19 January 2017).

Published online by Cambridge University Press

ICSU. (2017). A guide to SDG interactions: From science to implementation (D. J. Griggs, M. Nilsson, A. Stevance, and D. McCollum [Eds.]). Paris: International Council for Science.
Inoue, C. Y. A., and Franchini, M. (2020). Socio-environmentalism. In: *International relations from the global south: Worlds of difference*. A. B. Tickner and K. Smith (Eds.), pp. 159–184. Abingdon; New York: Routledge.
Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2019). *Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. E. S. Brondízio, J. Settele, S. Díaz and H. T. Ngo (Eds.). Bonn: IPBES secretariat.
Jones-Walters, L., and Çil, A. (2011). Biodiversity and stakeholder participation. *Journal for Nature Conservation* 19, 327–329.
Kashwan, P., Biermann, F., Gupta, A., and Okereke, C. (2020). Planetary justice: Prioritizing the poor in earth system governance. *Earth System Governance* 6, 100075.
Kaswan, A. (2020). Distributive environmental justice. In: *Environmental justice: Key issues*. B. Coolsaet (Ed.), pp. 21–36. Abingdon; New York: Routledge.
Kopnina, H. (2016). Half the Earth for people (or more)? Addressing ethical questions in conservation. *Biological Conservation* 203, 176–185.
Kopnina, H., Washington, H., Gray, J., and Taylor, B. (2018). The "future of conservation" debate: Defending ecocentrism and the Nature Needs Half movement. *Biological Conservation* 217, 140–148.
Leach, M., Reyers, B., Bai, X., et al. (2018). Equity and sustainability in the Anthropocene: A social–ecological systems perspective on their intertwined futures. *Global Sustainability* 1 Article e13, 1–13. https://doi.org/DOI: 10.1017/sus.2018.12
Liu, J., Hull, V., Batistella, M., et al. (2013). Framing sustainability in a telecoupled world. *Ecology and Society* 18 Article 26, 1–19. https://doi.org/10.5751/es-05873-180226
Lliso, B., Pascual, U., Engel, S., and Mariel, P. (2020). Payments for ecosystem services or collective stewardship of Mother Earth? Applying deliberative valuation in an indigenous community in Colombia. *Ecological Economics* 169, 106499.
Lund, J. F. and Saito-Jensen, M. (2013). Revisiting the issue of elite capture of participatory initiatives. *World Development* 46, 104–112.
MacDonald, K. I., and Corson, C. (2012). "TEEB begins now": A virtual moment in the production of natural capital. *Development and Change* 43, 159–184.
Malin, S. A., and Ryder, S. S. (2018). Developing deeply intersectional environmental justice scholarship. *Environmental Sociology* 4, 1–7.
Marion Suiseeya, K. R. (2016). Transforming Justice in REDD+ through a politics of difference approach. *Forests* 7, article 300. DOI: 10.3390/f7120300
(2017). Contesting justice in global forest governance: The promises and pitfalls of REDD+. *Conservation and Society* 15, 189–200.
(2020). Procedural justice matters: Power, representation, and participation in environmental governance. In: *Environmental Justice: Key Issues*. B. Coolsaet (Ed.), pp. 38–51. Abingdon; New York: Routledge.
Marion Suiseeya, K. R, and Zanotti, L. (2019). Making influence visible: Innovating ethnography at the Paris Climate Summit. *Global Environmental Politics* 19, 38–60.
Martin, A. (2017). *Just conservation: Biodiversity, wellbeing and sustainability.* Abingdon: Routledge.
Martin, A., Armijos, M. T., Coolsaet, B., et al. (2020). Environmental justice and transformations to sustainability. *Environment: Science and Policy for Sustainable Development* 62, 19–30.
Martin, A., Coolsaet, B., Corbera, E., et al. (2016). Justice and conservation: The need to incorporate recognition. *Biological Conservation* 197, 254–261.
Martin, A., McGuire, S., and Sullivan, S. (2013). Global environmental justice and biodiversity conservation. *Geographical Journal* 179, 122–131.
Martinez-Alier, J. (2002). *The environmentalism of the poor: A study of ecological conflicts and valuation*. Cheltenham: Edward Elgar.
McCarthy, D. P., Donald, P. F., Scharlemann, J. P., et al. (2012). Financial costs of meeting global biodiversity conservation targets: Current spending and unmet needs. *Science* 338, 946–949.

Published online by Cambridge University Press

McShane, T. O., Hirsch, P. D., Trung, T. C., et al. (2011). Hard choices: Making trade-offs between biodiversity conservation and human well-being. *Biological Conservation* 144, 966–972.
Miller, D. C., Agrawal, A., and Roberts, J. T. (2013). Biodiversity, governance, and the allocation of international aid for conservation. *Conservation Letters* 6, 12–20.
Morrison, T. H., Adger, W. N., Brown, K., et al. (2017). Mitigation and adaptation in polycentric systems: Sources of power in the pursuit of collective goals. *Wiley Interdisciplinary Reviews: Climate Change* 8. https://onlinelibrary.wiley.com/doi/full/10.1002/wcc.479
Newell, P., and Mulvaney, D. (2013). The political economy of the "just transition." *Geographical Journal* 179, 132–140.
Niemeyer, S. (2014). A defence of (deliberative) democracy in the Anthropocene. *Ethical Perspectives* 21, 15–45.
Okereke, C. (2006). Global environmental sustainability: Intragenerational equity and conceptions of justice in multilateral environmental regimes. *Geoforum* 37, 725–738.
(2008). Equity norms in global environmental governance. *Global Environmental Politics* 8, 25–50.
Paavola, J. (2004). Protected areas governance and justice: Theory and the European Union's Habitats Directive. *Environmental Sciences* 1, 59–77.
Page, E. (2011). Climatic justice and the fair distribution of atmospheric burdens: A conjunctive account. *The Monist* 94, 412–432.
Pascual, U., Balvanera, P., Díaz, S., et al. (2017). Valuing nature's contributions to people: The IPBES approach. *Current Opinion in Environmental Sustainability* 26, 7–16.
Patterson, J., Schulz, K., Vervoort, J., et al. (2017). Exploring the governance and politics of transformations towards sustainability. *Environmental Innovation and Societal Transitions* 24, 1–16.
Pellow, D. N. (2017). What is critical environmental justice? New York: John Wiley & Sons.
Pickering, J., Jotzo, F., and Wood, P. J. (2015). Sharing the global climate finance effort fairly with limited coordination. *Global Environmental Politics* 15, 39–62.
Presbitero, A. F. (2016). Too much and too fast? Public investment scaling-up and absorptive capacity. *Journal of Development Economics* 120, 17–31.
Rawls, J. (1999). *A theory of justice*. revised ed. Cambridge, MA: Belknap Press of Harvard University Press.
Reimerson, E. (2013). Between nature and culture: Exploring space for indigenous agency in the Convention on Biological Diversity. *Environmental Politics* 22, 992–1009. DOI: 10.1080/09644016.2012.737255
Roe, D. (2008). The origins and evolution of the conservation-poverty debate: A review of key literature, events and policy processes. *Oryx* 42, 491–503.
Scheidel, A., Del Bene, D., Liu, J., et al. (2020). Environmental conflicts and defenders: A global overview. *Global Environmental Change* 63, 102104.
Schleicher, J., Zaehringer, J. G., Fastré, C., et al. (2019). Protecting half of the planet could directly affect over one billion people. *Nature Sustainability* 2, 1094–1096.
Schlosberg, D. (2007). *Defining environmental justice: Theories, movements, and nature*. Oxford; New York: Oxford University Press.
Schlosberg, D., and Carruthers, D. (2010). Indigenous struggles, environmental justice, and community capabilities. *Global Environmental Politics* 10, 12–35.
Schlosberg, D., Collins, L. B., and Niemeyer, S. (2017). Adaptation policy and community discourse: Risk, vulnerability, and just transformation. *Environmental Politics* 26, 413–437. DOI: 10.1080/09644016.2017.1287628
Schreckenberg, K., Franks, P., Martin, A., and Lang, B. (2016). Unpacking equity for protected area conservation. *Parks* 22, 11–26.
Schroeder, H. (2010). Agency in international climate negotiations: The case of indigenous peoples and avoided deforestation. *International Environmental Agreements: Politics, Law and Economics* 10, 317–332.
Sen, A. (2009). *The idea of justice*. London: Allen Lane.
Shelton, D. (2007). Equity. In: *Oxford handbook of international environmental law.* D. Bodansky, J. Brunnée and E. Hey (Eds.), pp. 640–662. Oxford: Oxford University Press.
Sikor, T. (2013). *The justices and injustices of ecosystem services*. London: Routledge.

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Sikor, T., and Newell, P. (2014). Globalizing environmental justice? *Geoforum* 54, 151–157.
Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research* 104, 333–339.
Stevis, D. (2020). Labour unions and environmental justice: The trajectory and politics of just transitions. In: *Environmental Justice: Key Issues*. B. Coolsaet (Ed.), pp. 249–265. Abingdon; New York: Routledge.
Stone, C. D. (1996). La convention de Rio de 1992 sur la diversité biologique. In: *Le droit international face à l'éthique et à la politique de l'environnement*. I. Rens (Ed.), pp. 119–131. Geneva: Georg.
Swanson, T. (1999). Why is there a biodiversity convention? The international interest in centralized development planning. *International Affairs* 75, 307–331.
Swilling, M. (2019). *The age of sustainability: Just transitions in a complex world*. London: Routledge.
Takacs, D. (1996). *The idea of biodiversity: Philosophies of paradise*. Baltimore, MD: Johns Hopkins University Press.
Tauli-Corpuz, V. (2016). Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples. United Nations General Assembly. A/71/150 (29 July 2016). Available from https://bit.ly/34a58N0.
Tauli-Corpuz, V., Alcorn, J., Molnar, A., Healy, C., and Barrow, E. (2020). Cornered by PAs: Adopting rights-based approaches to enable cost-effective conservation and climate action. *World Development* 130, 104923.
Tengö, M., Hill, R., Malmer, P., et al. (2017). Weaving knowledge systems in IPBES, CBD and beyond – Lessons learned for sustainability. *Current Opinion in Environmental Sustainability* 26, 17–25. https://doi.org/https://doi.org/10.1016/j.cosust.2016.12.005
Tran, T. C., Ban, N. C., and Bhattacharyya, J. (2020). A review of successes, challenges, and lessons from Indigenous protected and conserved areas. *Biological Conservation* 241, 108271.
Twinamatsiko, M., Baker, J., Harrison, M., et al. (2014). *Linking conservation, equity and poverty alleviation: Understanding profiles and motivations of resource users and local perceptions of governance at Bwindi Impenetrable National Park, Uganda*. London: International Institute for Environment and Development. Available from https://bit.ly/34jMli7.
UN. (1992). Convention on Biological Diversity. United Nations Treaty Series 1760, 79-307. Available from https://bit.ly/3s86Eam.
Vucetich, J. A., Burnham, D., Macdonald, E. A., et al. (2018). Just conservation: What is it and should we pursue it? *Biological Conservation* 221, 23–33.
Waldron, A., Miller, D. C., Redding, D., et al. (2017). Reductions in global biodiversity loss predicted from conservation spending. *Nature* 551, 364–367.
Walker, G. (2012). *Environmental justice: Concepts, evidence and politics*. Abingdon; New York: Routledge.
Whyte, K. P. (2011). The recognition dimensions of environmental justice in Indian country. *Environmental Justice* 4, 199–205.
(2018). The recognition paradigm of environmental injustice. In: *The Routledge handbook of environmental justice*. R.Holifield, J. Chakraborty and G. Walker (Eds.), pp. 113–123. Abingdon: Routledge.
Williams, M. (1993). Re-articulating the third world coalition: The role of the environmental agenda. *Third World Quarterly* 14, 7–29.
Wilson, E. O. (2016). *Half-Earth. Our planet's fight for life*. New York: Norton.
Witter, R., Marion Suiseeya, K. R., Gruby, R. L., et al. (2015). Moments of influence in global environmental governance. *Environmental Politics* 24, 894–912. DOI: 10.1080/09644016.2015.1060036
Zafra-Calvo, N., Pascual, U., Brockington, D., et al. (2017). Towards an indicator system to assess equitable management in protected areas. *Biological Conservation* 211, 134–141.

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