



Chapter 10 SDG 10: Reduced Inequalities – An Environmental Justice Perspective on Implications for Forests and People

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Key Points

- SDG10 has the potential to reflect a core commitment within the SDGs – ‘leave no one behind’ – and to recognise that the dominant economic system exacerbates inequalities within countries through rules that reinforce the current global distribution of wealth.
- In principle, considerable synergies and complementarities exist between SDG 10 targets and principles of environmental justice (distributive, representative and recognition). However, there is a disjuncture between SDG 10 and SDGs on environmental sustainability, which may undermine efforts to promote environmental justice.
- A key gap in SDG 10 is the failure to include trade in spite of the heightened intensification of markets for forest products driving unsustainable forest resource extraction while exacerbating distributive principles of justice between upstream and downstream actors in global production networks.
- For SDG 10 to properly address inequality structures, it must improve distributive, representative and recognition justice for marginalised populations. This would have a positive impact on forest-dependent populations.
- Addressing migration-related indicators in SDG 10 sheds light on the importance of these issues in forestry policy and research and challenges simplistic assumptions informing existing research. Whether this amounts to significant reduction in environmental injustices would, however, depend on what informs the framing of SDG 10 – concerns for making migration work for development or narrow nationalist fears of looming migrant crisis.

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10.1 Introduction

As we embark on the great collective journey, we pledge that no one will be left behind. Recognizing that dignity of the human person is fundamental, we wish to see the goals and targets met for all nations and peoples and all segments of society. (UN General Assembly 2015: 1)

SDG 10 calls for reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country. The Goal also addresses inequalities among countries, including those related to representation, migration and development assistance (UN 2018). This is an ambitious goal with many overlapping and distinct targets, as is reflected in [Table 10.1](#). Inequality is understood in this chapter as ‘the state of not being equal, especially in status, rights, and opportunities’ (UN DESA 2015: 1). The goal recognises the importance of combating economic, social and cultural dimensions of inequalities at the individual, group and societal levels (Kabeer and Santos 2017). Proponents argue that SDG 10 closely reflects one of the core agendas of Agenda 2030 on Sustainable Development – ‘leave no one behind’ – and shows clear signs of lessons learned from fundamental criticisms levelled against the Millennium Development Goals (MDGs), predecessor to the SDGs (Kabeer 2015, Stuart and Woodroffe 2016, Willis 2016). The MDGs were criticised for focusing narrowly on halving extreme poverty rather than addressing the underlying inequalities that generate poverty in the first place. Hence, SDG 10 is a reaction to growing disparities in income and socio-economic well-being despite overall increases in gross domestic product (GDP), with roots in inclusive-growth approaches (UNDP 2013).

Likewise, the targets and associated indicators pertaining to inequalities among countries recognise that the dominant economic system exacerbates inequalities within countries through rules that reinforce the current global distribution of wealth (IIED 2016). As demonstrated in [Table 10.1](#), SDG 10 focuses on enhancing representation of developing countries in global markets, managing migration and increasing the flow of funds to poor countries through foreign direct investment and official development flows. In this way, addressing inequalities among countries is both an end in itself as well as a means to reducing inequalities within countries. SDG 10 acknowledges the role that migration and remittances can play in furthering the global development agenda by contributing to the reduction of inequalities at the country and cross-country levels. However, critics point out that SDG 10’s emphasis on managing migration reflects growing anxieties over the migrant crisis in Europe, North America and Australia rather than leveraging migration

Table 10.1 SDG 10 targets

Inequality within countries	Inequalities among countries
10.1 Progressively achieve and sustain income growth of the bottom 40 per cent at a higher rate than the national average	10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
10.2 Empower and promote the social, economic and political inclusion of all irrespective of age, disability, race, ethnicity, origin, religion or economic or other status	10.6 Ensure enhanced representation and voice for developing countries in decision-making in global economic and financial institutions in order to deliver effective, credible, accountable and legitimate institutions
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	10.A Implement the principle of special and differential treatment for developing countries, in particular least-developed countries, in accordance with World Trade Organization agreements
	10.B Encourage official development assistance and financial flows, including foreign direct investment, to states where there is greatest need, in particular least-developed countries, African countries, small island developing countries, and landlocked developing countries
	10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through implementation of planned and well-managed migration policies
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	10.C Reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent
Adapted from: https://sustainabledevelopment.un.org/sdg10	

and development for socially just, environmentally responsive development (Nijenhuis and Leung 2017).

This chapter evaluates the potential effects of addressing SDG 10 on forest outcomes using an ‘environmental justice lens’ (Forsyth 2014, Forsyth and Sikor 2013, Fraser 1995, 2009; Martin 2017, Sikor and Newell 2014). We focus on three principles of environmental justice, which relate to ‘distribution’, ‘representation’ and ‘recognition’. This perspective shows considerable synergies and complementarities between SDG 10 and environmental justice goals; it also exposes pitfalls, contradictions and trade-offs.

First, we show that because SDG 10 narrowly translates its aspirational goals into easily measurable indicators, addressing SDG 10 may risk undermining representative, distributive and recognition notions of justice. Second, the disjuncture between SDG 10 and the other SDGs may mean that resource distribution, recognition and representation could be sidelined. Third, a key gap in SDG 10 is the absence of trade despite an intensification of markets for forest products driving forest resource extraction while exacerbating distributive justice between upstream and downstream actors in production networks (Myers and Muhajir 2015, Myers et al. 2017, Myers et al. *forthcoming*).

We combine an overall evaluation of SDG 10 with a more detailed focus on two clusters of targets and indicators related to inequalities within countries (SDG Targets 10.1–10.4) and migration and remittances (10.7 and 10C), and we draw on existing literature on these topics in forestry. The scholarship concerned with inequalities in forestry has long recognised that there is no direct causal relationship between inequalities and forest outcomes (Agrawal and Benson 2011, Agrawal and Gibson 1999, Agrawal and Ostrom 2001, Johnson 2004, Poteete and Ostrom 2004). Institutions, or formal and informal rules and norms that govern how forests are managed, mediate the effects of inequalities on forests and people. We will show that this literature remains divided between those concerned with inequalities to the extent that they influence environmental outcomes and those who view pre-existing social relations as fundamentally constituting institutions. The latter suggests that for institutions to properly promote environmental justice requires addressing the socio-economic, cultural and symbolic inequalities (re)produced in institutions. From this perspective, if SDG 10 successfully reduces broad-based inequalities, as outlined in Targets 10.1–10.4, this will in turn reduce environmental injustices on marginalised individuals and groups in forests. But this hinges on whether, to what extent and how SDG 10 will amount to such substantive reductions in inequalities.

We will point out that addressing the migration-related targets and indicators in SDG 10 may contribute to elevating the importance of focusing on

these issues in the forestry literature too. Most forestry research either ignores the role that migration, mobility and remittances play in current forest transitions or makes far-fetched conclusions about its effects on forests (Hecht et al. 2015). However, it is unclear whether SDG 10, in the way it is framed, opens room for promoting environmental justice for poor and marginalised groups through well-managed migration and remittances.

In what follows, we outline the conceptual framework that informs our analyses (Section 10.2). We then provide an overall evaluation of the gaps and openings in SDG 10 and dive deeper into two clusters of issues – inequalities within countries (Section 10.3) and migration and remittances (Section 10.4). Section 10.5 offers a summary and concluding remarks about potential trade-offs, shortcomings and new openings.

10.2 Principles of Environmental Justice: An Approach to Evaluating SDG 10

Environmental outcomes include forest productivity, availability of natural resources, biological diversity and carbon sequestration (World Bank 2009). Human well-being encompasses economic, social and political dimensions. We focus on the human well-being outcomes related to inequality, which encompass economic, social and political dimensions. An environmental justice perspective is particularly well-suited as it acknowledges the inherent synergies, tensions and trade-offs of equality and environmental goals and the need to find a balance between the two, rather than assume win-win outcomes.

Justice is broadly defined as fairness (Rawls 1999), yet what fairness means is contested (Sen 2009). Environmental justice, as a theory and a practice, has a long, rich history in the Global North, particularly in the USA (Agyeman 2005, Bullard 2005, Cole and Foster 2001). More recently, social movements, international organisations and businesses in the Global South widely use the language of justice to lend credibility to their struggles. Examples include local communities and environmental activists resisting dispossession from customary land, opposing polluting industries and struggling for fair distribution of natural-resource revenues. These also include international donors and governments seeking to promote a rights-based approach, and/or rectify past injustices (Newell 2006, Sikor 2010, Sikor and Stahl 2011, Walker 2009).

Different actors bring different notions of (in)justice in environmental struggles depending on the historical circumstances they inherit and the contemporary political economy they must navigate (Forsyth 2014, Forsyth and

Sikor 2013, Martin 2013). Certain assertions about justice find public support; others are rejected outright as illegitimate concerns (Kumar 2014, Mulvaney 2014, Sikor and Newell 2014). There is often a gulf between justice principles and implementation efforts, with national and local political and economic factors often subverting original intentions (Mehta et al. 2014). The challenge, as Sikor and Newell point out (2014: 153), is to ask ‘what kinds of justice are being asserted, by whom and for whom’.

Notwithstanding the plurality of conceptions and practices of justice, as Schlosberg (2004, 2007) points out, everyday struggles and mobilisations around justice are about distribution of environmental goods and bads, recognition of particular group identities and histories, and participation in decision-making. Within this, three notions of justice are apparent: distribution, recognition and representation. These principles build on Fraser’s (1995, 2009) understanding of justice.

Distribution notions of justice emerge from socio-economic injustice in the form of exploitation (having the fruits of one’s labour appropriated by others); economic marginalisation (being confined to poorly paid work or dearth of income-generating opportunities); and/or deprivation (being denied basic living conditions). The remedies to distributive injustices call for political-economic restructuring, which might involve redistributing income, altering division of labour and/or transforming other economic structures.

Recognition justice aims to remedy symbolic-cultural injustices: revaluing identities against cultural domination, valorising socio-cultural diversity against non-recognition or transforming society against disrespect. Such injustices take many forms, but some are ascribed from birth and hence harder to shed (Fraser 1995, 2009). The remedies may involve cultural and symbolic change such as upwardly revaluing certain identities, recognising and publicly valorising socio-cultural diversity, and/or wholesale transformation of societal representation in ways that would change everyone’s sense of self.

Representation justice is about parity of participation in processes: society is fair to the extent that it makes participation possible for all members in institutionalised values and norms, in deliberation processes about distribution rules and in social interactions. These parity principles apply to all spheres of life: from family, market, and informal and formal politics to various civil society associations (Fraser 2009).

All three justice notions are intertwined. Cultural norms biased against marginalised social groups are underpinned by material support from the state or market. For instance, the caste system in Nepal, introduced in the

eighteenth century by the ruling elite, resulted in the subjugation of a diverse population, with systematic political favours to some and marginalisation to others (Guneratne 2002, Hoffer 1979, Levine 1987). Meanwhile, economic disadvantage impedes parity of participation in cultural and social life. Continuing with the example from Nepal, a major reason why low-caste members and minorities are under-represented in natural-resource management derives from high opportunity costs to participating meaningfully in such processes (Agarwal 2016, Bennett et al. 2013). While the three justice notions reinforce one another, some distinctions are important as one notion is not a precondition for another. Accepting some notions of justice by powerful actors can mean jeopardising others. For instance, Myers and Mujhair's (2015) research in Indonesia found that while Indigenous peoples living in or adjacent to the national park decry the lack of material benefit from the park, they have resisted the state's offers for material benefits on the grounds that consenting to such offers would constitute acceptance of state authority over their customary land and its continued non-recognition of their rights. A justice understanding of inequality highlights the importance of how (in) equalities are framed and by whom.

We use these three notions of environmental justice to evaluate the effects of SDG 10 on marginalised individuals and social groups in forests. We provide an overall evaluation of SDG 10 and then focus in-depth on two clusters of targets and indicators dealing with inequalities and migration.

10.3 An Overview of Complementarities and Gaps between SDG 10 and Environmental Justice

SDG 10 Targets 10.1–4 are articulated in ways that recognise how a wide range of economic, social and political variables are distributed among individuals, between social groups, and across multiple and intersecting groups (Kabeer and Santos 2017). Target 10.1 recognises income disparities within a country and Target 10.3 recognises opportunity distribution; both share considerable complementarities with distributive notions of justice. Target 10.2 calls for empowering and promoting the social, economic and political inclusion of all (irrespective of age, disability, race, ethnicity, origin, region or economic or other social status), which is compatible with recognition and representation notions of justice. Target 10.4 acknowledges policies to address diverse social, economic and political inequalities in line with all three notions of environmental justice.

Despite this, there is a disjunction between the way SDG 10 targets are articulated and the indicators selected for measuring target progress. While

Target 10.2 aims for social, economic and political inclusion for all ‘irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status’, Indicator 10.2.1 measures progress in economic terms only and in regards to ‘age, sex and persons of disabilities’. The indicator is arguably easier to measure because countries likely collect statistics on income, which in turn can be disaggregated by age, gender and perhaps by disability. Social and political inclusion of all is difficult to translate into a measurable indicator. Many countries do not collect adequate data on race, ethnicity and/or religion, especially if these relations are highly politicised and/or a narrow subset is officially recognised (Sijapati Basnett 2018, UN Women 2018).

The extent to which representative and recognition notions of justice can be addressed through SDG 10 will be restricted if countries are only held accountable for progress against the very narrow Indicator 10.2.1. An environmental justice perspective would prompt attention to a broader array of potential reforms related to recognition of who the marginalised are and what sustains their marginalisation; distribution of broader social, economic and political resources beyond income; and parity of participation of marginalised social groups in decision-making.

SDG 10 is disconnected from SDGs pertaining to environmental sustainability (such as SDGs 12–15). The potential tensions, trade-offs and synergies between SDG 10 and these environmental SDGs remains unacknowledged. Such a disjuncture is problematic because environmental justice scholarship is increasingly concerned with the effects environmental solutions spurred by global environmental challenges have on localised struggles (Sikor and Newell 2014). For instance, SDG 15 (Life on Land) – the SDG that deals directly with forests – only alludes to distributive justice once, in Target 15.6, and specifically in the context of access and utilisation of genetic resources. Meanwhile, Target 15.A calls to ‘mobilise and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems’. In this regard, the environmental justice and political ecology literature (Li 2017, Peluso and Lund 2011, Ribot and Peluso 2003, Schoenberger et al. 2017, White et al. 2012) points to the very unequal distributions of access to, and control over, natural resources that such pursuits generate, and the ways in which they create and exacerbate place-based conflicts related to cultural recognition and political self-determination (Newell 2005, 2007). The ensuing conflicts are then as much about whose notions of justice and framings of environmental problems are privileged as about competition over access to and control over material resources (Fraser 2009, Jasanoff and Martello 2004, Sikor 2013).

10.3.1 'Trade' as a Major Lacunae in SDG 10

Trade is not explicitly mentioned in SDG 10. It is arguably a precursor to SDG 8 (Decent Work and Economic Growth) which only explicitly mentions increasing aid for trade (Target 8.A). SDG 17 (Partnerships for the Goals) includes a set of targets related to trade but only mentions strengthening the World Trade Organization (WTO) trading system (Target 17.10), improving the market share of developing countries (Target 17.11) and reducing trade barriers (Target 17.12). Forest resource extraction is largely about markets and trade. Trade has also been a major driver of inequality among countries since colonial times when the dominance of colonial powers was imposed over resource-rich (natural and human) (Hickel 2017). SDG 10 has a lacuna: the neoliberal global trading system produces inequalities both among and within countries (Hickel 2017). While this was certainly an argument that Marx (1867) made, contemporary scholars continue to make the point of the incompatibility between the global system of trade and equality (see Harvey 2004, Moore 2010, Thurow 1975, Williamson 2000).

Trade of forest products includes timber, non-timber plant species, animal products and carbon (which reinforces the place of conservation in markets). Heightened intensification of markets for forests and forest products in the contemporary era means that a wider range and combination of actors are now involved in regulating global forest trading regimes, each with their own implications for others (Maryudi et al. 2015, Maryudi and Myers 2018, Myers 2015). These include different layers of the state, various private sector interests, global NGOs and organised and spontaneous civil mobilisations. Such processes add pressure on some actors and bestow more control on others. Hence, the globalisation of these markets is fertile ground for understanding inequalities and resulting environmental injustices at global and local levels (Bair 2005).

Global markets also affect access to non-timber forest products, and thereby forest-dependent livelihoods (Belcher and Schreckenberg 2007). Studies show a direct correlation between the value of a product and the extent to which powerful actors exercise control over harvesting, production and trading (Dove 1994, Wollenberg 2001). Markets are a significant driver for local peoples to engage with forests (Ruiz-Pérez et al. 2004). As global market prices increase, so does the involvement of powerful, connected and risk-tolerant actors, which then pushes out less-powerful actors. Examples include gaharu (swiftlet nests) in Southeast Asia (Marcone 2005, Soehartono and Newton 2002), and shea in West Africa (Elias and Arora-Jonsson 2017, Elias and Carney 2007). These processes create and exacerbate distributive injustices especially, and, as we show shortly, can also have consequences for representative and recognition justices.

Anti-deforestation strategies of the 1970s–1990s relied mainly on state- or bilaterally enforced log-export bans and protection of vulnerable species. Now, supranational policies and actions address illegal logging by cutting off the markets for illegally harvested timber. The 2003 EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan outlines a system in which (almost) all wood and timber products entering the EU must be proven legal. Efforts to reduce import of illegal timber have also resulted in laws in the USA (US Lacey Act 2008 amendment), Australia (Australian Illegal Logging Prohibition Act 2012) and Japan (Japanese Clean Wood Act 2017). These initiatives are based on a notion of legality that is often rooted in hegemonic notions of forests as a global good – frequently at odds with the interests of local communities (Myers et al. [forthcoming](#)).

The EU FLEGT Action Plan and the EU Timber Regulations dictate that traders must demonstrate timber legality through document trails and verification systems. This can have significant implications for small-scale producers (Cerutti and Tacconi 2008, Hajjar 2014, Maryudi and Myers 2018). Maryudi and Myers (2018) show that the increased administration and costs of verifying legality in Indonesia have exacerbated the concentration of power among the bigger and wealthier manufacturers and exporters. Distributive injustices arise when processing is increasingly focused around larger actors, based on the island of Java, with smaller actors, especially on peripheral islands, unable to comply with or make arrangements to otherwise adapt to increasing requirements.

Private certification of sustainable forest products by groups such as the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) serves as yet another emerging form of forest governance that bypasses the state to implement a non-state solution to the problem of unsustainable forestry practices (Schepers 2009). The FSC, for instance, was a response to the lack of progress after Rio in 1992. The World Wide Fund for Nature (WWF) and a coalition of environmental and social NGOs formed the FSC (Bartley 2007, Cashore et al. 2007, Espach and Ralph 2006). Like FLEGT, FSC represents a relatively new way of governing forests by cutting across local, national and international levels in novel ways to connect the Global North and South. While such private certification enables more direct linkages among actors, it is only available to those who can afford it and who have the required knowledge to navigate the complicated process to comply with standards. In this way, private certification reinforces or creates new forms of distributive injustices.

While the state's role in creating and exacerbating injustices has been well documented (Byrne et al. 2016, Lund 2016, Peluso 1994, Scott 1999), the unprecedented influence of non-state actors is also problematic because

concerns of rights and equality are on the periphery of the current policy focus. Furthermore, these recent developments disrupt normative systems of accountability between the state and its citizens without offering alternatives to advance democratic citizenship and parity of participation for marginalised forest-dependent peoples.

The inequalities embedded in globalised trade regimes have led to counterclaims of social and environmental injustices – human rights violations, ecological integrity threats and future capabilities harm (Forsyth and Sikor 2013, Martin 2017, Schlosberg 2013, Sikor 2013, Sikor and Stahl 2011, Walker 2012). These claims of injustice provide the impetus for initiatives to facilitate collective action beyond the nation state (Bernstein and Cashore 2007), such as the SDGs, a number of which touch on forest issues. In response, new markets have emerged for forest resources that aim to pay local communities for the provision of ecosystem services – protecting forests to store carbon – e.g. Reducing Emissions from Forest Degradation and Deforestation (REDD+). Such conservation efforts use distributive notions of justice to compensate local communities for the opportunity costs or the loss of access to customary forestland from which they derive food, medicines and materials.

However, critics point out that such compensatory mechanisms (financial payments and livelihoods training) insufficiently recognise customary rights and community identities tied to forestlands. Furthermore, engaging local and Indigenous peoples to participate in predetermined notions of sustainable forest management is insufficient to satisfy representation claims of injustice when local perspectives have no place in decision-making or defining forest outcomes (Schroeder et al. 2014). While the claims of recognition injustices are far from new, the legitimisation of these claims is historically unprecedented. These calls challenge the dominant conceptions of justice enshrined in tropical forest governance and call into question whose version of forest governance, shaped by trade, is adopted at global and local levels. They push the boundaries of what equality means for different actors. The question then is whether SDG 10's principles of equality, as outlined in the targets and corresponding indicators, are sufficient.

10.4 Inequalities within Countries and Forests – Targets 10.1–10.4

Unlike many topics covered in SDG 10 that have received less attention in forestry/environment scholarship (such as migration and remittances, global financial markets, global institutions), the relationship between inequality within countries (Targets 10.1 and 10.4) and environmental outcomes have long been a matter of debate (Martin 2017). Environmental degradation,

including forest loss and degradation, can reinforce socio-economic and cultural inequalities, and inequalities influence environmental and forest management (Islam 2015). In what follows, we draw from two schools of thought – ‘commons’ and ‘entitlement’ scholarship (Johnson 2004) – concerned with this relationship. They differ with regard to their normative commitments, interpretation of institutions and conceptual and methodological approaches. We will demonstrate that the ‘entitlement’ school of thought offers more insights on whether and under what conditions reducing inequalities, as outlined in SDG 10, contributes to environmental justice.

A first school of thought, which Johnson (2004) refers to as ‘commons scholars’, is concerned with the influence of inequality on the efficiency and environmental health of the commons. It largely consists of modelling individual behaviour based on rational choice theories to explore how institutions can keep users from overexploiting or degrading the commons. Within this literature, authors offer different views of the relationship between socio-economic inequality or heterogeneity, collective action or local governance institutions, and environmental outcomes. Their research is largely informed by theory and case studies, and, in many of the works cited, positive ecological outcomes from collective action and/or well-functioning forest-governance institutions are assumed rather than empirically demonstrated (Andersson and Agrawal 2011).

Within ‘commons’ scholarship, a large body of research demonstrates a positive relationship between socio-economic equality, largely assessed on the basis of wealth holdings and forest condition (Budhathoki 2004, Trawick 2001). Its authors argue that socio-economic inequality leads to exclusionary decision-making (representative injustice) (Neupane 2003), distrust (Seabright 1993) and an unequal distribution of benefits from commonly managed resources (distributive injustice) (Moore 1993). Lack of social cohesion and disincentives for the rich – who can benefit from private resources – to contribute to collective action can hinder collective action and lead to inefficient resource governance (Chatterton and Chatterton 2001, Corbera et al. 2007, Mukhopadhyay 2004, Smith 2004), perverse resource-use strategies and less ecologically sustainable governance outcomes. One of the few multi-locality, cross-country comparative studies of forest-user groups (n=228) empirically demonstrates that economic inequalities within and across these groups consistently lead to negative forest outcomes (Andersson and Agarwal 2011).¹

¹ The study draws from data from the International Forestry Resources and Institutions (IFRI) network. The IFRI network (<http://ifri.forgov.org/>) brings together 14 Collaborating Research Centers (CRCs) worldwide that examine how governance arrangements affect forests and forest-dependent peoples. Using a common methodology, these CRCs have collected data on biodiversity, livelihoods, institutions and forest carbon for more than 250 sites in 15 countries since 1992.

Other commons scholars posit the contrary: that socio-economic inequality (linked to notions of distributive justice) can be positively related to environmental outcomes. This literature builds on Olson's (1965) influential work on privileged groups, which sees group heterogeneity as supporting collective action assuming that rich individuals bring benefits to the rest of the group (Sandler 2015). As the argument goes, there can be high costs to initiating and maintaining collective action, which may more readily be borne by better-resourced individuals than in a decentralised manner among a homogenous group (Hardin 1982). Wealthier individuals may bear these costs either for the sake of a well-functioning institution or for a greater share of benefits from common pool resources (Baland and Platteau 1999). In this view, complementarities amid socio-economically differentiated groups can promote cooperative resource management (Quiggin 1982), and social exclusions can encourage collective action among the disenfranchised (Jodha 1985), leading to more favourable resource management outcomes.

Finally, some commons scholars demonstrate a non-linear, U-shaped relationship between equality, local governance and ecological outcomes (Baker 1998, Dayton-Johnson and Bardhan 2002, Molinas 1998, Zapata et al. 2014). In a comparative study of 104 local peasant cooperative institutions in Paraguay, Molinas (1998) identifies lower levels of cooperation among both the least and the most unequal (based on endowments) organisations. In the low inequality cases, the capacity to bear the costs of collective action was low, whereas resentment and out-migration occurred in highly unequal contexts and impeded cooperation. Similarly, Baker (1998) notes that some inequality can allow certain individuals to carry a bigger share of the organising costs of collective action, but too much inequality can diminish shared interests in the collective good. Zapata et al. (2014) underscore that any such analysis must consider how power is distributed within communities, as well as the interests of the more powerful actors. Using panel data from the Bolivian Amazon, they find a negative correlation between income inequality at the village level and deforestation at the household level, which they claim supports the idea that 'unilateral conservation' can occur when wealthier actors perceive more benefits than costs from environmental conservation, and vice versa.

In one of the few studies explicitly and empirically examining the three-way relationship between heterogeneity, collective action and forest outcomes, Varughese and Ostrom (2001) find that spatial, caste and ethnic, and wealth inequalities – linked to recognition and distributive notions of justice, respectively – among forest-user-group members in Nepal pose challenges but do not in themselves determine the success of collective action. When groups have autonomy to make their own rules, they can overcome stressful

heterogeneities through institutional arrangements adapted to their local circumstances. In Nepal, Adhikari and Lovett (2006) echo that the effects of heterogeneity on collective action can vary widely and recommend flexible systems of governance that can allow management regimes to be adapted to local conditions. Poteete and Ostrom (2004), in turn, based on a multi-country review of IFRI studies, note that heterogeneity and the size of user groups affect collective action in contextually specific ways. The authors argue that the importance of group characteristics may depend on other attributes of the resource and resource users, and that interaction effects and contingent relations play a role in explaining divergent findings. Inequality thus interacts with forest market conditions, management rights and rules, for example, to shape forest outcomes.

Influenced by the literature on entitlements (Sen 1981, Leach et al. 1999), 'entitlements scholars' (Johnson 2004) bring a different focus to these analyses. They elucidate that positive forest outcomes will rarely equally benefit all users, including poor and marginalised social groups that rely most on the forest and have the least voice and influence in decision-making processes. Hence, while recognising that environmental outcomes are critical, they argue for local institutions that enable poor and marginalised groups to access and use the commons to their benefit, thereby furthering distributive, representative and recognition notions of justice in their own right (Agarwal 2001, 2002, 2010, Bandiaky 2008, Cleaver 2002, Moore 1993, Peluso 1994, Sikor and Lund 2010).

Taking a historical perspective, entitlement scholars focus on the structures operating across scales (micro to macro) that shape social relations and reinforce (in)equalities in the commons. They underscore the complex, uncertain and dynamic processes and relations underpinning access to and control over resources, environmental management and social and ecological change (Scoones 1999). In this perspective, policies and multi-scalar socio-political processes, as well as historical and path-dependent patterns of resource use, non-place-based relations (e.g. markets) and the presence and power of different state and non-state actors and authorities, contribute to shaping forest outcomes (Coomes et al. 2016, Mearns 1996, Rangan and Kull 2009, Robbins 2004, Zimmerer and Bassett 2003).

This scholarship begins with the recognition that power relations, and thus inequalities, are embedded in formal or bureaucratic institutions (introduced through organisations and legal structures) as well as informal or socially embedded institutions (based on culture, social organisation and everyday practices) that govern common property resources (Cleaver 2002). Because institutional processes of formation, maintenance and change are inherently power laden and asymmetrical, institutional arrangements do not affect nor

are they affected by inequalities; rather, they are constituted by them, as inequalities are at the very heart of institutional building and change (Agrawal and Gibson 1999). Ideologically embedded inequalities linked to gender and/or ethnicity or caste (recognition notions of justice), as well as those linked to political participation (representative justice) and access to and distribution of resources (distributive justice), are thus reproduced and reinforced in forest-governance institutions (Agarwal 2002, 2010, Cleaver 2002). These constituent inequalities problematise assumptions that local institutions are rooted in moral economies based on equity, social welfare and security (Li 1996, Mosse 1997).

Studies across regional contexts show that collective resource management institutions and initiatives often reinforce representative injustices, excluding poorer households and groups marginalised on the basis of gender, caste or landlessness (recognition justice), thereby reinforcing existing power disparities and hierarchies (Agarwal 2001, 2010, Astuti and McGregor 2016, Beck and Nesmith 2001, Hébert and Rosen 2007, Taylor 2000). Even when such groups are formally represented in committees of forest-user groups, skewed power relations and their lack of recognition in these spaces typically result in limited participation and influence over decision-making processes and related outcomes (Agarwal 2001). For example, Sunam and McCarthy's (2010) work on community-forest-user groups in Nepal shows that procedures for electing committee members favour better off, male, upper caste residents, and the interests of powerful elites rather than marginalised forest-dependent groups. Still in Nepal, Chaudhary et al. (2018) demonstrate that such exclusions in participation and representation result in an inequitable distribution of benefits from the forest.

Likewise, in Tanzania the framing of the community-based forest-management policy in technical and procedural terms reproduced intra-village inequalities, as it called for local expertise and required literacy and administrative skills to respond to the system's bureaucratic obligations. As only wealthy and powerful villagers were considered 'experts', this village elite dominated local decision-making processes and conservation narratives as well as distributive benefits from forest-related income (Green and Lund 2014; see also Khatun et al. 2015 on elite control in REDD+ Tanzania, and Kopnina 2017 on elite capture of commodified natural resources and forest ecosystem services). In other contexts, women and less-powerful men have been systematically excluded from collective management institutions (Mosse 1997, Taylor 2000), or have participated only nominally, without real voice or influence (Baynes et al. 2015).

Of concern from an environmental justice perspective is not only how inequality affects access to and influence in governance processes (representative

justice), but also whether or how processes of institutional formation and change create and sustain resource access for vulnerable groups (distributive justice). For instance, Agarwal (2001, 2010) points out that in India and Nepal, rules of entry in forest-user committees, participation in decision-making and principles of distribution of resources reproduce inequalities on the basis of gender and caste in seemingly participatory community-forestry user groups. In Kenya, the distribution of REDD+ benefits accrued first and disproportionately to larger landowners, with patterns of land ownership reflecting land dispossession processes rooted in colonial times (Chomba et al. 2015). A review of the social impacts of neoliberal conservation underscores that the 'commodification and marketisation of nature creates new rents and incomes for formal or informal appropriation by elites and patron-client networks' (Holmes and Cavanaugh 2016: 205). Li (2018, personal communication) argues that the current forest-tenure reform championed in Indonesia (Siscawati 2017) only favours social groups that can conform to state-sanctioned definitions of indigeneity (recognition justice), which may not easily correspond to complex social realities, thereby creating new forms of contestations and exclusions. Similarly, a comparative assessment of forest-tenure reforms in 30 countries across Asia and Africa shows that new statutory rights do not automatically translate into rights in practice, and that institutional weaknesses and policy distortions thwart environmental justice (Larson et al. 2010). Additionally, the justice that is to be translated through international and national programmes such as REDD+ is typically framed in global narratives that focus on participation (representative justice) or material concerns (e.g. benefit-sharing from REDD+) (distributive justice), overlooking local understandings of justice and the experiences of dispossession of identity (recognition justice) tied to nature and land (Suiseeya 2017).

10.5 Migration and Remittances – Targets 10.7, 10.C and 17.3

Many observers hail the SDGs for explicitly recognising migration for the first time in the global development agenda. By devoting two indicators to migration and remittance out of a total of nine indicators in SDG 10, it is clear that migration and remittance are being framed in the SDGs as a way of addressing inequalities within and between countries. Target 17.3 further views remittances as 'mobilising additional financing resources for developing countries from multiple sources'. The SDG framework, therefore, recognises that migration and remittances potentially contribute to the GDP of poor countries and help reduce income inequalities within and between countries (Appave and Sinha 2017). Target 10.7 emphasises 'planned and well-managed migration

policies' (orderly, safe, regulated and responsible migration and mobility), even as the corresponding Indicator (10.7.1) only mentions number of countries that have implemented well-managed migration policies but does not define what this means.

Forestry policies and academic scholarship have been slow to catch up despite the prominence of migration in the global development agenda and the fact that enhanced mobility and the remittances generated by mobility are key elements of current transitions in forested landscapes of developed countries. As Hecht et al. (2015) found through a review of existing literature, much forest-based research assumes that rural households and communities are largely static and spatially bounded, while issues of migration, mobility and remittances lie outside the attention of most natural-resource-governance policymakers. Where forestry and environmental policy do acknowledge migration, it is often seen as disruptive or a sign of livelihood failure. The scholarship that does exist remains premised on simplistic and dichotomous assumptions that view in-migration into forested areas as a cause of tropical deforestation and out-migration as leading to forest regeneration and growth (Carr 2009a, 2009b, Hecht et al. 2012, 2014, Wunder et al. 2014a, 2014b). Each of these potential impacts of migration on forests is possible, but there has been limited research on the many mediating factors that influence these outcomes. These may include a wide variety of social, economic, political and environmental factors playing a role in determining outcomes for forests and peoples, including from an environmental justice perspective. These include time and type of incorporation, feedback loops of economic development and technological change, changing tenure systems, differences in cultural norms and different forms of migration. Instead of these simplistic views, Black et al. (2011) rightly point to the importance of examining the multiple drivers and net effects of migration/environmental change.

The literature on forests and migration in Indonesia is a case in point. Based on an extensive review of literature, Thung and Juniwaty (2018) find that in the 1980s and 1990s, deforestation and forest degradation were often blamed on environmentally destructive migrants, with Secrett's 1986 article in *The Ecologist* often credited with initiating such a discursive trend. Since the decline of the state-sponsored transmigration programme, through which poor Javanese were resettled in the forest frontiers of Indonesia's remoter islands, attention has mostly shifted towards spontaneous migration (see, for instance, Potter 2012), with many researchers drawing conclusions similar to previous studies and perpetuating negative images about migrants. A number of scholars have also sought to quantify the effects of in-migration on forest cover change through various GIS and statistical analyses. For instance, coupling satellite imagery on forest cover change between 2000 and 2007 with

results of the housing and population censuses of 2000 and 2010, Darmawan et al. (2016) found a strong correlation between deforestation and migration in Indonesia. Similar conclusions were drawn from another longitudinal case study in Sulawesi, which concludes that a 1 per cent increase in population due to in-migration leads to a 0.93 per cent increase in forest encroachment for agricultural purposes (Maertens et al. 2002).

In comparison, others who have looked more carefully at the relationship between in-migration and forest change in the Indonesian context point out that correlations do not necessarily imply causation. Even where there is evidence that in-migration has coincided with a corresponding rise in deforestation and forest degradation, the role of a wide range of mediating factors is more important than migration per se. Examples include factors that drive people to migrate to forest frontiers (such as commodity booms, infrastructure projects, government policies) and customary/local institutions that are in place to govern forests (see Thung and Juniwati 2018 for an extensive review of this literature). Abe's (2006) research on land-use practices among migrant communities in Sumatra's peat swamp forests found that migrant communities for generations have prioritised short-term cultivation of coconut without much regard for long-term sustainability. This is because migrants remain frontier communities, or strangers, because of the difficult biophysical environment of the forest frontier, the cultural and social features of migrants and of receiving communities, and the wider social-economic-political conditions under which migrants operate. For Abe (2006) the wider policy environment is a key determining factor – government policies incentivise migrants to move spontaneously to peat swamp forests but do not address their needs for education or healthcare that would enable them to settle and cultivate over a longer time. Eghenter's (2006) ethnography of new movements of people into the interior of Borneo for large-scale exploitation of particular forest products (gaharu, or aloeswood) also serves as an illustration of the interplay between local institutions and new migration trends in determining environmental outcomes. Eghenter found that the growing movement of outsiders and return migrants in search of quick and lucrative returns from gaharu stretched the ability of the Apo Kayan's customary institutions to physically monitor the arrival of more collectors, and jeopardised internal abilities to develop equitable solutions in the management of gaharu and other forest resources.

Similar studies focusing on effects of other types of migration – out-migration, circular migration and multi-local livelihoods – point to potential synergies and trade-offs between migration and forest outcomes and the role of interacting factors in mediating the relationship between the two (Hecht et al. 2014). Robson and Berkes (2011) found that rural out-migration in Oaxaca,

Mexico, had contributed to extensive forest resurgence, but also a gradual loss of the forest-agriculture mosaic, resulting in a decline in biodiversity. In this instance, forest resurgence did not automatically translate into biodiversity gain. Parry et al.'s (2010) study in the state of Amazonas in Brazil found that the effect of depopulation of remote areas improved forest cover, but this was largely offset by new threats from logging, gold mining and resource extraction. Padoch et al. (2008) showed that in Amazonia most rural communities have established homes in urban centres, and the movement between rural and urban areas is frequent and commonplace. These households maintain their consumption patterns of forest products even when they move to cities, and they continue to play a role in rural forest-use decisions. In this sense, just as the definition of households is getting fuzzy as they stretch between rural and urban areas, so are patterns of land- and forest-use change.

A subset of literature on the links between remittances (financial and social) and forests mirrors the findings outlined above in the wider scholarship on migration and forests. While some attribute remittances to positive change in forests, others argue that remittances in fact contribute to deforestation and/or forest degradation (Hecht et al. 2014). In Latin America, migration from rural areas and receipt of remittances has led, in some cases, to an increase in cash incomes and agricultural retraction that has produced forest resurgence. In comparison, Montefrio et al.'s (2014) research among Filipino oil palm workers in Malaysia found that the flow of ideas on land-use decisions from migrants to their family members back in the Philippines influenced farmers' decisions to engage with the oil palm industry in the migrants' home countries. This resulted in a switch from smallholder agricultural practices to large-scale, monocultural plantations. Still others, such as Gray and Bilsborrow (2014), point out that remittances and out-migration had mixed, countervailing and weak effects on agricultural and forestry activities.

From an environmental justice perspective, however, even the more careful and nuanced studies do not provide much insights on implications of migration and remittances for distributive, representative and recognition justice. One recent exception is Peluso and Purwanto's (2018) research in Java, Indonesia, which explored the effects of remittances sent by poor and landless women (who were previously presiding illegally in government monopolised forestlands in Java) on state–society power dynamics in forest governance. The study finds that an increasing number of these women are migrating to Hong Kong and other prosperous Asian cities to work as maids and domestic labourers; they send remittances back to their husbands, who remain as formal forest labourers. The remittances pay for everyday household expenses and are eventually invested in agrarian resources that generate income. This has led to an unprecedented increase in investment in

cows, with a subsequent surge in planting of elephant grass as fodder for the cows in light gaps in the forest understory. Slowly and unintentionally, these women are redressing historical injustices in access to forest resources by making inroads into the control of state monopolised forestlands.

Meanwhile, research on the effects of male out-migration on those left behind in forested landscapes in Nepal is less optimistic and more ambiguous. There are comparatively more studies emanating from Nepal because of the recent surge in large-scale male out-migration for employment purposes in Malaysia and the Gulf countries since the early 2000s (Shrestha 2017), Nepal's reputation as a global leader in innovative participatory environmental governance (Baynes et al. 2015, Fox 2018) and well-established movements for greater social, economic and political justice following the Maoist movement and ensuing civil conflict in the country (Bennett et al. 2013, Sijapati Basnett 2011).

In Nepal, scholars have inquired whether and to what extent male out-migration contributes to environmental justice for marginalised women who are left behind. While some point out that women and marginalised social groups are now able to exercise unprecedented voice and influence in community-wide decision-making processes related to forests (Adhikari and Hobley 2011), others find that such voice is largely offset by a surge in paid and unpaid work burdens that these social groups must now assume. Others rightly recognise that the effects of migration on distributive and representative justice for individuals and social groups are influenced by pre-existing gender and social relations (Sijapati Basnett 2011), a generational divide between migrants and the elderly male population that is left behind (Lama et al. 2017), and the structure and composition of the household (Giri and Darnhofer 2010).

Likewise, in a noteworthy study, Sunam and McCarthy (2015) find that while migration has the potential to lift households and families out of poverty, its effects on distributive justice are mediated by modes of incorporation into migration processes. Those who are better off, with greater social networks, are able to access lucrative migration opportunities, whereas others take up highly risky jobs with limited prospects for upward mobility. Poor and marginalised households incur significant debt in order to pay for migration. Agriculture and forest-based livelihoods subsidise the direct and indirect costs of migration for them. There is limited evidence that migrants invest any surplus income on agriculture and forestry or diversify their livelihoods in a way that lowers their growing dependence on remittance. In this context, the prospects of poor and marginalised migrant workers and their families are limited and highly contingent on the vagaries of the highly unequal market for migrant labour (Fox 2018, Sijapati Basnett and Manandhar 2018).

Other scholars also point out that not all remittances are invested back into forests or into maintaining or enhancing agrarian capital. This is because of ‘opportunity costs of other potential applications of funds and diverse interests of households’ (Hecht et al. 2015: 16). For instance, in peri-urban landscapes, significant agricultural and forest retraction has occurred, and migrant investment in real estate and housing speculation is widespread. These landscapes of immigration have been documented in Central America and Mexico (Kandel and Cuellar 2012), in the Andes (Bebbington and Batterbury 2001, Rudel 2006) and in Nepal (Sunam and McCarthy 2015). The effects have not only been a reduction in forest cover and/or decline in incentives to manage commonly held forests, but also heightened environmental injustices. Sunam and McCarthy (2015), for instance, point to aggravated inequalities in access to private and public lands, with potential consequences for food security and nutrition for poor and marginalised social groups.

10.6 Summary and Concluding Remarks

This chapter has discussed the potential effects of addressing SDG 10 on forest outcomes from an environmental justice perspective, focusing on two major clusters of issues in SDG 10: inequalities within countries, and migration and remittances. We have defined environmental justice as constituting three notions of justice: distribution, representation and recognition. While distribution notions of justice emerge from socio-economic injustice, recognition relates to symbolic and/or cultural injustice. Representation justice is concerned with parity of participation in institutionalised values and norms, deliberation about rules in distribution and social interactions more broadly. All three notions of justice are intertwined, and yet one is not a precondition for another. Authoritative definitions of environmental justice may clash with and, therefore, have trade-offs with poor and marginalised local peoples’ visions of what is just.

We find considerable overlaps among the three notions of justice and SDG 10 targets pertaining to inequalities within countries. However, target aspirations are not fully translated into the corresponding indicators, limiting SDG 10’s contribution to environmental justice. Likewise, SDG 10 remains disconnected from SDGs pertaining to environmental sustainability, even when these have bearing on the achievement of SDG 10 and on the promotion of environmental justice.

One of the major gaps within SDG 10 is that trade is not explicitly mentioned, despite mounting concerns about the incompatibility between global systems of trade and goals of equality. A rise in global prices for forest products is often accompanied by unsustainable resource extraction alongside

consolidation of power and wealth by a few. Rules governing global trade of forest products are increasingly influenced by international and supranational actors, thereby bypassing the state. Such rules are rooted in hegemonic notions of good governance for the 'global good', which are often at odds with the interests of local communities. Alternatively, complying with such rules is only possible for those who can afford to navigate increasingly complicated and costly systems. The consequence has been that smaller actors are being pushed out while normative systems of accountability between the state and marginalised citizens are being disrupted. Such inequalities in the global trading regime have given rise to unprecedented movements for environmental justice. However, current efforts to address these calls remain pre-occupied by the need to compensate forest-dependent communities for loss and/or incentivise their action (distributive). Such terms and ideas foreclose the application of representative and recognition notions of justice for poor and marginalised people in forested landscapes.

Therefore, by omitting trade, SDG 10 excludes a major source of inequality within and between countries. It also misses options for redressing historical injustices levelled against poor marginalised social groups and supporting environmental justice movements that truly represent them.

10.6.1 Targets and Indicators Related to Inequalities within Countries

The literature on forestry, and on common pool resources more broadly, includes a vast and growing body of scholarship examining the linkages between inequalities and forest outcomes, though epistemological and normative commitments within this scholarship vary considerably. While some argue that there is a clear trade-off or synergy between levels of inequalities and forest outcomes, others view a U-shaped relationship between these two variables. Still others point out that pre-existing levels of inequalities can diminish as long as local people have autonomy over formation of rules to govern their resources and that the institutional arrangements established reflect and/or are adaptable to local conditions. Meanwhile, critical scholarship in the field of environmental justice and political ecology, among others, begins with a recognition that power relations, and thus inequalities, are embedded in formal or bureaucratic institutions as well as informal or socially embedded institutions that govern common property resources. Institutional arrangements do not merely affect nor are they merely affected by inequalities; rather, inequalities are at the very heart of institutional building and change. Deeply rooted relations of caste, class, gender and/or ethnicity (recognition justice), as well as those linked to political participation (representative

justice) and access to and distribution of resources (distributive justice), are thus reproduced and reinforced in forest-governance institutions.

If SDG 10 successfully reduces broad-based structural inequalities, it is likely to have positive spill-over effects for furthering distributive, representative and recognition justice for forest-dependent populations. However, whether, to what extent and how this will happen remains unclear. Addressing the rising divide between the rich and the poor would require a broad-based political and social agenda, which encompasses reforms in health and education, land tenure, tax and transfer systems, and jobs, to name just a few (see Picketty and Goldhammer 2014, World Bank 2016), while transforming state–society–market relations (see Hall et al. 2011). All these reforms are in fact covered across the SDG framework, but despite pledges to integrate actions across goals (UN General Assembly 2015), each goal operates in silo. And even within SDG 10, there is a disconnect between the aspirations behind the targets and the choice of corresponding indicators to measure progress against their achievement. Such disjunctions within SDG 10 and between SDG 10 and other SDGs limit the extent to which SDG 10 will amount to transformative changes within and between countries.

10.6.2 Targets and Indicators Related to Migration and Remittances

Forestry literature either largely ignores migration and remittances or narrowly frames them as a problem or solution for forests. Even the more nuanced and careful analyses offer limited insights from an environmental justice perspective. The small body of studies that do address these gaps, however, point to an array of mediating variables, such as intra-household dynamics, modes of incorporation into migration, opportunity costs of remittance investment, etc.

In such a context, addressing the migration- and remittance-related targets and indicators in SDG 10 may contribute to greater focus on these issues in the forestry scholarship too. But for SDG 10 to contribute meaningfully towards promoting environmental justice for marginalised individuals and social groups in forested landscapes, policies aimed at ‘managing migration’ (as outlined in SDG 10) need to consider measures to redress pre-existing injustices in gender and generational lines, offer increased opportunities for poor and socially marginalised groups to migrate and invest their remittances productively, and safeguard access rights of those who are left behind, among other considerations. However, it is unclear whether Target 10.7’s focus on planned and well-managed migration policies reflects developmentalist views or narrow nationalist ones. There is a growing consensus among migration

and development scholars that ‘migration alone cannot independently set in motion broader processes of human and economic development’ (de Haas 2012: 14). This literature (see de Haan and Roglay 2002, de Haas 2012, Rigg 2006) implies that migration can produce and exacerbate distributive, representative and recognition notions of justice in developing countries between those who are able to migrate and those who cannot afford to; those who migrate to further enhance their livelihood portfolio versus those for whom migration is low return and survivalist (Razavi 2009); and between failed and successful migrants (Sunam and McCarthy 2015). Critics such as Nijenhuis and Leung (2017: 11) caution that such emphasis on managed migration is a reflection of the growing anxiety in Europe and America about the migration ‘crisis’ and the inflow of refugees in developed countries, rather than a concern for reducing inequalities and promoting justice within migrant-sending developing countries and between migrant-receiving (developed) and migrant-sending countries. In this regard, whether or not addressing the migration-related targets and indicators will amount to significant reduction in environmental injustices would depend on what informs the framing of SDG 10: concerns for making migration work for development, or narrow nationalist fears of looming migrant crisis.

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