2 Mapping the core actors and issues defining international forest governance

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Abstract: This chapter maps the core actors and issues defining international forest governance across a landscape of contemporary social and environmental challenges. The existence of multiple competing frameworks for charting this landscape highlight the politically contested nature of forest conservation and use. In order to avoid the risk of bias by adopting one of these pre-existing frameworks, the analysis is conducted using six generic environmental and socio-economic themes. The mapping exercise reveals that the involvement of diverse public and private actors both within and outside the forest sector and within and outside formal government negotiations, at both regional and global scales, has enabled a relatively comprehensive set of aspirational goals to emerge. However, conflicting actor interests and values continue to constrain the translation of these goals into coordinated mandates for on-the-ground action. The integration of forests into the international climate regime is a potential 'win-win' solution to cross-sectoral forest-related challenges because it enables the establishment of a global system of economic incentives tied to emissions reductions. However, attempts to operationalise these incentives reveal familiar, ongoing conflicts over the environmental and social valuation of forests. Regional and non-governmental experimentation may prove vital to overcoming these longstanding barriers to globalscale coordinated action on forests.

Keywords: Forest, climate, international, governance, biodiversity, social welfare, deforestation, REDD.

2.1. Introduction

This chapter provides a broad overview or 'map' of the key actors and issues that currently define international forest governance. Its purpose is threefold. First, it situates forest governance within the broader landscape of bio-physical and socio-economic problems of international concern. Second, it identifies the range of key actors who are instrumental in placing these issues on international agendas and in framing and contesting responses. Third, it assesses the comprehensiveness of the goals and frameworks established thus far through international agreement and the lessons that can be learned about the role of diverse actors in addressing the full scope of international forest-related challenges.

The chapter is organised as follows. Section 2.2 discusses three perspectives that might be used to identify key international actors. Sections 2.3 and 2.4 introduce and apply a thematic framework for assessing the core environmental, social and economic forest-related goals articulated in global-scale agreements and the actors most involved in placing these goals on the global agenda. Section 2.5 assesses the role of regional and international criteria and indicator processes, and forest certification, as forums exclusively focused on the definition and monitoring of sustainable forest management (SFM). Section 2.6 discusses regional processes in Africa, Asia-Pacific, Europe and Latin America and their interaction with global-scale agendas. The chapter concludes with a summary of key findings.

As echoed in the title of this report, the sheer complexity of international forest governance precludes an exhaustive analysis of all potentially relevant international goal-setting activities. We encourage readers interested in more in-depth coverage of specific substantive issues to consult the primary and secondary sources cited in the text. In addition, Appendix 1 provides a list and brief description of key global, regional and non-state international forestrelated instruments. Most importantly, we encourage the full range of concerned stakeholders to engage in analyses of the kind presented in this chapter in order to facilitate the multi-actor, multi-scale and cross-sectoral learning that is essential for addressing contemporary forest-related challenges.

2.2 Defining the key actors

A vast range of actors is involved directly and/or indirectly in international forest governance, and a variety of conceptual frameworks may be used to understand their various roles. A *realist*, 'state-centric' framework (e.g. Bull 1977) focuses on the actions of national governments as the entities empowered to make decisions within formal intergovernmental negotiations. This perspective highlights power struggles among nations in which actors negotiate to maintain or improve the advantage of their countries relative to other countries.

In contrast, a transgovernmentalism perspective (Slaughter 2004) draws attention to the various ministries that attend forest-related intergovernmental forums and their differing priorities and objectives. Within the United Nations Forum on Forests (UNFF), for example, some delegations are led by forestry departments, some by foreign offices, some by trade ministries and some by United Nations missions. According to a transgovernmentalism view, there is an international forest policy community that transcends national boundaries and includes other actors, such as scientists and other experts. It draws attention to the possible conflicts that may emerge between international forest-related processes and intergovernmental organisations such as the World Trade Organisation (WTO).

A *pluralist* view highlights the role of different stakeholder groups, including local community groups, indigenous peoples, forest owners, timber companies, the retail sector, farmers and other actors. It encompasses both governmental and non-governmental organisations, including hybrid organisations such as the International Union for Conservation of Nature (IUCN), entirely non-governmental organisations such as the World Wide Fund for Nature (WWF), the Forest Peoples Programme and Global Witness, universities, and research institutes such as the Center for International Forest Research (CI-FOR). It also considers cross-organisational partnerships such as the Collaborative Partnership on Forests (CPF) and the influence of participating actors from international development and financial institutions such as the Food and Agriculture Organization of the United Nations (FAO) and the World Bank. It also takes into account the political dynamics that led many non-governmental organisations (NGOs) to jointly create the Forest Stewardship Council (FSC) as the first global certification scheme.

Staff and personnel may move among the various actors involved in forest governance. Often experts and advisors are invited to serve on national delegations. It is not uncommon for delegations to include trade advisors from business, conservation advisors from environmental NGOs, and policy advisors from the university sector. Delegations may be subject, therefore, to multiple influences, both within and outside government. Within forest-related intergovernmental organisations, various caucus groups have emerged who undertake negotiations as blocs; they include the Group of 77 Developing Countries (G77) + China at the UNFF and the Like Minded Megadiverse Countries at the Convention on Biological Diversity (CBD). The European Union (EU) acts as a sui generis actor, the sole regional economic integration organisation in the United Nations system, with political authority divided between the Presidency (for issues that are the subject of member state competence) and the European Commission (for issues that are the subject of community competence). The dynamics between the Presidency and the Commission are key to understanding European forest politics.

Political power is dispersed unevenly among these various actors, with countries with high forest cover (such as Brazil) and countries with major forest-based industries (such as the United States of America) tending to exercise more influence on political negotiations than smaller, economically weaker countries. When international negotiations stall, a small group of 'friends of the chair' may be invited to convene to work on compromise text. The exact membership of friends-of-the-chair groups varies, but within the UNFF it typically includes the United States, the EU, the G77 (with Brazil and China also invited) and possibly representatives of the African Group and the Association of Southeast Asian Nations (ASEAN).

These three perspectives on key international actors combine to yield a view of international forest governance as dynamic and evolving. Policy outputs are the result of an inherently political process whereby delegations cooperate in the shared endeavour of developing forest policy while simultaneously competing to promote narrower national and sectoral interests driven by political pressures, lobbying and influence from other actors. Policies agreed outside governmental and intergovernmental organisations, such as the principles of forest certification, may also influence the standards and policies of governmental actors. Taken together, the goals identified in both governmental and non-governmental agreements are the result of political pressure and lobbying; inevitably, therefore, they are the result of compromises, concessions and accommodations.

2.3 Mapping key forest-related goals

The creation of a legible overview or 'map' of core international forest-related goals requires a clear organisational framework. By its very nature, however, any framework may prioritise certain actors, issues, values or perspectives while excluding others. Inevitably, therefore, whatever framework this chapter adopts will be open to contention. We acknowledge the importance of these debates and observe that the very absence of a universally agreed framework highlights the deeply politically contested nature of forest conservation and use.

One highly influential frame for forest-related issues is the 'three-legged stool' of sustainability popularised by the Brundtland Commission's report "Our Common Future" (UN 1987). According to this metaphor, environmental, social and economic needs form separate legs of a stool, each of which must have equal weight to achieve sustainable resource use. However, as discussed further in Chapter 5, this metaphor is increasingly contested. At an abstract level it has been criticised for implying that unlimited economic growth is achievable as long as it is 'balanced', and for failing to make clear that some, although not necessarily all, tradeoffs between environmental, social and economic priorities may result in environmental degradation. As a classification framework, the stool metaphor is problematic because the legs are interactive and thus a given resource management issue may not fit exclusively into a single leg.

More specialised frameworks have emerged within various institutional settings that we could, in theory, use to analyse the coverage and comprehensiveness of the international forest regime. These include intergovernmental frames such as the Millennium Development Goals of the World Summit on Sustainable Development, the programmatic areas and goals of the CBD's Programme of Work (discussed in Chapter 3), and the seven thematic elements of SFM developed by the CPF (discussed in Section 2.5). Some non-state actors, such as those supporting the Programme for the Endorsement of Forest Certification (PEFC), have embraced intergovernmental frameworks such as the regional criteria and indicator processes. Others, however, have explicitly rejected such frameworks in favour of their own; the FSC, for example, has developed ten principles for well-managed forests (see Section 2.5).

Given the level of political contention surrounding existing institutionalised frameworks we have chosen not to rely exclusively on any of them. Indeed, in the process of drafting this report it became clear just how strongly many actors associate each framework with a particular set of interests; to use one or the other, therefore, risked alienating a large segment of our desired readership. This widespread contention over the framing of forest problems, no matter how generally or broadly stated they may appear, highlights the essential roles that ideas and discourse play in international forest governance – a theme developed in greater depth in Chapter 4 and Chapter 5.

In the absence of a universally accepted framework we have developed a hybrid approach that draws from the range of available discursive frames. This enables a comprehensive assessment of the biophysical, socio-economic and institutional dimensions of international forest-related goals, organised under the following three dimensions and six themes:

• Biophysical

Theme 1: Forest extent and land-use change Theme 2: Ecosystem processes (including forest degradation/restoration) Theme 3: Biodiversity

• Socio-economic

Theme 4: Economic development (including international trade and investment and resource transfer from developed to developing countries) Theme 5: Social welfare (including livelihoods and poverty alleviation, access and benefit-sharing, indigenous rights and workers' rights)

• Institutional

Theme 6: Governance.

Our treatment of the institutional dimension focuses on the ways in which problems of forest governance have been framed as international issues. We do not attempt to cover the myriad procedural mechanisms, such as international and national planning, monitoring and reporting, that various global and regional processes have developed to operationalise their substantive goals; these are addressed in Chapter 4 and subsequent chapters.

2.4. Thematic assessment of global-scale intergovernmental processes

Each sub-section below starts with a brief discussion of a given theme and the issues the theme raises for global forest governance. This is followed by a box listing the key goals and objectives that have emerged from within global-scale forest-related processes to address those issues. The goals are restricted to those listed in the conventions or agreements themselves (as opposed to decisions, programmes of work, etc., of subsequent conference of the parties [COPs] to those conventions or agreements). The exceptions are those decisions of the COP to the United Nations Framework Convention on Climate Change (UNFCCC) related to reducing emissions from deforestation and degradation (REDD) and REDD plus forest enhancement (REDD+); the latter are included because of the extraordinary influence that REDD+ negotiations have already had on the international forestry community in advance of a post-Kyoto Protocol climate agreement.

2.4.1 Theme 1: Forest extent and land-use change

Global forest cover has been reduced by an estimated 20-50% over the last several hundred years, primarily due to agricultural conversion (Matthews et al. 2000). Other significant catalysts of forest loss include road-building to facilitate timber extraction and mining, urbanisation, and climate change. While, in most developed countries, the net total forest area is stable or expanding, the loss of tropical forests has accelerated; in the last decade, about 13 million hectares of forests per year were converted to other uses (FAO 2010). Increasingly, the conversion of forests to agriculture is driven by industrial-scale production for urban populations (DeFries et al. 2010). Over the next 30 years, commercial agriculture is expected to continue as a lead driver of deforestation in developing countries, alongside continued growth in global demand for food and biofuels (FAO 2002).

As further discussed under themes 2–6, this continued reduction in the global forest area is a matter of environmental, social and economic concern for a wide range of forest stakeholders. Arguably, recent estimates that forest loss accounts for 12–20% of all anthropogenic greenhouse gas (GHG) emissions (IPCC 2007; van der Werf et al. 2009) have led to international consensus on the need for global governance and goal-setting to address the issue.

The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in

Box 2.1 Key goals concerning land-use change (forest extent)

- Take positive and transparent action towards reforestation, afforestation and forest conservation, as appropriate (*UNCED 1992, The Forest Principles, Principle 8(a)*)
- Promote sustainable management and conservation of sinks and reservoirs of all greenhouse gases, including forests (*UNFCCC 1992, Article 4.1(d)*)
- The net changes in greenhouse gas emissions from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, shall be reviewed in accordance with the commitments of each Party included in Annex I (*Kyoto Protocol 1997, Article 3.3*)
- Reverse the loss of environmental resources (United Nations Millennium Development Goals 2000, Target 7A)
- Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation (UNFF NLBI 2008, Objective 1)
- Reduce emissions from deforestation and forest degradation (UNFCCC COP 13/Decision 1 (Bali Action Plan) 2008; COP 15/Decision 4 (Methodological Guidance for REDD+) 2009).

1992 was a pivotal event for bringing tropical deforestation onto the intergovernmental agenda while also highlighting considerable tensions between developed and developing countries on the issue (Dimitrov 2005; Humphreys 2006; Tarasofsky 1999). The developing countries asserted their sovereign right to convert forests to more economically productive use, much as now-developed countries did in the past, and further argued that if they were to refrain from forest conversion they should be compensated for the opportunity cost incurred through the transfer of financial resources and technology. Developed countries declined to provide such compensation.

Ultimately, UNCED produced two documents directly related to forests: the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests (known as the Forest Principles), and Chapter 11 ("Combating Deforestation") of Agenda 21. The latter highlighted forest loss as a recognised concern but contained no goals committing to its reversal. The language of the Forest Principles is non-committal, including non-directory phrasing such as "take positive action" and "as appropriate" (Principle 8(a)). Negotiations on deforestation were carried beyond UNCED within an increasing array of forestrelated intergovernmental processes, largely within the forest sector itself. From a transgovernmentalism perspective, these negotiations excluded the key actor networks in agriculture, mining and other sectors that were playing a pivotal role in much of the ongoing forest loss (Geist and Lambin 2002; Rudel et al. 2009).

A notable exception was the gradual strengthening, under the UNFCCC, of the link between forest loss and GHG emissions. The text of the UNFCCC, which was agreed at UNCED, includes forestry in the broader concept of land-use change (Article 4.1(d)), reflecting a greater cross-sectoral focus, albeit with the same type of discretionary wording found in the Forest Principles. Along similar lines, Goal 7, Target 7A of the Millennium Development Goals (adopted by the United Nations in 2000) calls for the reversing of the loss of environmental resources and refers to "alarming" rates of deforestation, although there is no specific call to reverse forest loss.

The decision of the United States not to ratify the UNFCCC's Kyoto Protocol further shifted actor network dynamics by removing a politically powerful country that was strongly opposed to legally binding, measurable targets for emissions reductions (Barrett 1998; Hovi et al. 2003). The decision to include measurable targets for emissions reductions within the Kyoto Protocol set the stage for the linking of land-use decisions with those targets.

At first, however, this linkage was strictly limited in scope. Many European countries, international NGOs, and some key developing countries – such as Brazil – initially resisted the inclusion of natural forests as carbon sinks to count towards emissions targets and in particular argued for the exclusion of avoided tropical deforestation as a sink under the modalities of the Kyoto Protocol. The reasons for this resistance varied between actors; they included concerns over: sovereignty; capacity for adequate monitoring and enforcement; and the environmental, social and economic impacts of using an abundant yet vulnerable natural resource to offset fossil-fuel emissions (Boyd et al. 2008).

By 2005, however, the positions of many actors within both the forest and climate policy communities had begun to change rapidly and dramatically. In that year, the Coalition for Rainforest Nations, which included Papua New Guinea, Indonesia and a number of other key tropical countries, submitted a proposal to the UNFCCC to reduce their rates of deforestation and degradation in exchange for compensation (Humphreys 2008). Unlike past demands for such compensation, REDD (and its later iteration, REDD+) came with the promise of substantial governmental and private financial support tied to legally binding emissions reduction targets and/or global carbon markets. Moreover, it offered a mechanism for addressing not only forest management but also other more lucrative land uses that currently drive forest loss. REDD+ has since gained support from an unprecedented array of actors in many sectors (Levin et al. 2008).

It is important to note, however, that at the time of writing the text on REDD+ remains mostly in draft form and is included in this analysis only because of the enormous amount of attention and resources it has generated prior to its formal agreement (Skutsch and Mccall 2010). To date, parties have been unable to agree on many of the rules by which a REDD+ mechanism would be governed. Much debate has centred on the need for social and environmental safeguards, including mechanisms to protect the rights of indigenous and local communities and to conserve biodiversity. As discussed in Chapter 5, these debates highlight more fundamental, underlying conflicts over issues such as the definition of what constitutes a forest and whether parties should be allowed to convert natural forests to plantations (Sasaki and Putz 2009). The possible role of REDD+ in international emissions trading schemes is contested and it is also unclear how the baseline or reference rates for both deforestation and degradation will be established; the measurement of forest degradation remains particularly problematic (e.g. Angelsen and Wertz-Kanounnikoff 2008). Nevertheless, tentative progress on these issues is reflected in the decision on methodological guidance made by COP 15 of the UNFCCC (Dec. 4/2009). This decision addresses the identification of drivers of deforestation; the use of Intergovernmental Panel on Climate Change guidelines for estimating anthropogenic forest-related GHG emissions and changes in forest cover; and the establishment of national monitoring systems.

2.4.2 Theme 2: Ecosystem processes (including forest degradation/restora-tion)

This theme addresses the effect of human activities on ecosystem processes, including efforts to slow and/or reverse forest degradation. It is estimated that about two-thirds of the world's remaining forests have been "significantly" altered by human activity (excluding the effects of climate change) (CBD 2006). However, the determination of what constitutes degradation – as opposed to human-induced change that may be considered sustainable or wellmanaged – requires an agreed frame of reference as well as adequate monitoring capacity. To some, for example, natural disturbances (such as fire or insect outbreaks) constitute an important component of a healthy forest, while others may consider these

detrimental to management objectives. Likewise, it can be difficult to determine the extent to which such disturbances are within the "range of natural variability" (Landres et al. 1999) or have been exacerbated by human impacts and are detrimental to ecosystem resilience. Similarly, while some view logging as forest degradation and a common precursor to conversion, others see it as part of managing a forest sustainably. Other human impacts are viewed more consistently as negative; for example, the introduction (either accidentally or intentionally) of invasive alien species has been identified as one of the top-three threats to biodiversity (the other two being habitat loss and hunting and/or harvesting; Clavero and Garcia-Berthou 2005).

A diverse array of actors is involved in framing the issue of human-induced ecosystem change; such actors have chosen various intergovernmental processes to do so. The United Nations Convention to Combat Desertification (UNCCD) is the only convention to expressly address ecosystem degradation in its title. The UNCCD was spearheaded by a coalition of African governments as a means to gain international support for addressing the desertification and drought affecting much of the African continent. Developed countries agreed to the Convention without making additional funds available. Thus, the UNCCD was created to address concerns that disproportionately affect one region and has since struggled to find traction at a global scale.

Possible routes past this obstacle may have been formed by the linking of forests to climate change via the concept of adaptation brought to the fore by the UNFCCC, which also highlights Africa as a highpriority focus for adaptation support (Article 4.1(e)). While such support has been slow in materialising, the recent increase in attention and funding around REDD+ appears to be spilling over into adaptation efforts as well (Skutsch and Mccall 2010).

A number of other global processes, including the CBD, the International Tropical Timber Agreement (ITTA) and the UNFF's Non-Legally Binding Instrument on All Types of Forests (NLBI) also address ecosystem degradation, each involving different, although overlapping, transgovernmental networks. While there appears to be some diffusion of issues and ideas across these networks, this may mask underlying differences in the definition of what constitutes forest degradation as opposed to sustainable forest use.

Nevertheless, there appears to be quite widespread agreement on the importance of setting aside areas of forest for special protection. The establishment of protected areas is among the key goals of both the CBD and the NLBI, although each has taken a different approach. In negotiating the NLBI, some actors, such as the EU, had pushed for a quantitative and time-bound target on protected areas, but this

Box 2.2 Key goals concerning ecosystem/forest degradation

- Combat desertification and mitigate the effects of drought, particularly in Africa, through rehabilitation, conservation and sustainable management of land and water resources (*UNCCD* 1994, Article 2)
- Prepare for adaptation to the impacts of climate change, and plan for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods (*UNFCCC 1992, Article 4.1(e)*; see also UNFCCC decisions under Theme 1)
- Rehabilitate and restore degraded ecosystems (*CBD 1992*, *Article 8(f)*)
- Support tropical timber reforestation and rehabilitation of degraded forest land (*ITTA 1994/2006 Article 1(j)*)
- Prevent the spread of alien species which threaten ecosystems, habitats or species (*CBD 1992*, *Article 8(h)*)
- Increase efforts to prevent forest degradation (UNFF NLBI 2008, Objective 1)
- Establish a system of protected areas (*CBD* 1992, *Article* 8 (*a*))
- Increase significantly the area of protected forests (UNFF NLBI 2008, Objective 3)
- Recognise the contributions of a range of forest values, including environmental services, to sustainable forest management (*ITTA 2006, Article 1(q); UNFF NLBI 2008, Article 6(j)*)
- Control and reduce emissions of sulphur, nitrogen oxides, ammonia and volatile organic compounds (*Gothenburg Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone 1999, Article 2*).

was opposed by both Brazil and the United States. The CBD, in contrast, has established increasingly detailed (albeit unenforceable) targets for the expansion of protected areas, stratified by major biome (Schmitt et al. 2009). The IUCN's World Commission on Protected Areas and the World Bank–WWF Alliance have also been active proponents for the creation of forested protected areas. Likewise, the World Heritage Convention and the Ramsar Convention on Wetlands of International Importance both promote the designation of protected areas, including forested ecosystems, that meet certain specifications.

The emergence of the concept of environmental services in later global agreements (e.g. the ITTA 2006, Article 1(q); the NLBI, Article 1(j)) is notable in two major regards. First, in concert with REDD+, it reflects what many have noted as the growing popularity of market-based approaches that attach monetary

values to socially desired goods as a means to incentivise, rather than regulate, behaviour (Paterson et al. 2003; Riain 2000; Simmons and Elkins 2004). This is most directly articulated in the NLBI, which encourages parties to "reflect" the range of forest values "in the marketplace" (NLBI, 1(j)). This approach is consistent with the preferences of those private-sector actors and states that are supportive of trade liberalisation. Second, it serves, at least in theory, to expand forest-related goal-setting to more comprehensively cover the biogeochemical components of forests (e.g. water, soil, biodiversity and microclimate). In this latter sense, the concept of environmental services addresses the priorities of many conservation NGOs and is consistent with trends in earth system science (e.g. Armitage et al. 2009; Bengtsson et al. 2003; Holling and Meffe 1996).

Some of the most authoritative language addressing forest-related health issues emerged in response to air pollution, thereby involving a different set of transgovernmental actor networks. The 1979 Convention on Long-Range Transboundary Air Pollution was among the earliest multilateral environmental agreements. It has since produced eight protocols, including the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (the 'Gothenburg Protocol'), which was agreed partly in response to forest dieback in Europe and North America and includes legally binding targets.

2.4.3 Theme 3: Biological diversity

Biological diversity refers to "the variability among living organisms", including the "diversity within species and of ecosystems" (CBD 1992, Article 2). Anthropogenic activities have driven a global loss of biodiversity at a rate that is unprecedented in the last 65 million years (Reid and Miller 1989; Wake and Vredenburg 2008); the rate of loss continues to increase (MEA 2005).

The 1975 Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES) was the first multilateral environmental agreement to address the conservation of species. From a pluralist perspective, environmental NGOs played an important role in drawing international attention to trade in endangered species. As early as 1963, IUCN called for a convention to address it and, for the following ten years, worked closely with the United Nations Environment Programme (UNEP) to bring it into being (Sands and Bedecarré 1989). Under CITES, species listed in Appendix I are prohibited from commercial trade, species listed in Appendix II are monitored and can be traded internationally with a permit, and species listed in Appendix III are monitored by the listing state(s). Only a few

Box 2.3 Key goals concerning biological diversity

- Regulate and monitor the international trade in endangered species (*CITES 1973, Appendices I–III listings*)
- Conserve biological diversity, including diversity within species, between species and of ecosystems (*CBD 1992, Articles 1 and 2*)
- Promote sustainable use of the components of biodiversity (*CBD 1992*, *Article 1*)
- In-situlex-situ conservation of biodiversity (CBD 1992, Articles 8 and 9)
- Protect biodiversity from the potential risks posed by living modified organisms (*CBD 1992, Article 19; Cartagena Protocol on Biosafety, 2000*)
- Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss (*United Nations Millennium Development Goals, 2000, Target 7B*).

timber species are listed (e.g. bigleaf mahogany – *Swietenia macrophylla* – in Appendix II). In general, while CITES was instrumental in establishing endangered species as a matter of global concern, its scope is strictly limited to issues of international trade and thus it cannot address broader questions of species' and habitat conservation.

Instruments dealing with biodiversity in a more comprehensive manner have been developed only from the early 1990s, beginning with the influential CBD, which emerged from UNCED. The governmental drivers behind the negotiation of the CBD were tropical forest countries with major biodiversity hotspots; many of these countries now comprise the CBD caucus group known as Like-Minded Megadiverse Countries. Conservation organisations such as IUCN, WWF and the World Conservation Monitoring Centre also lobbied for the CBD (McConnell 1996) and have been engaged in the CBD process throughout.

The CBD addresses biodiversity conservation both *in-situ* (i.e. in the natural surroundings of the various components of biodiversity) and *ex-situ* (i.e. outside the natural surroundings of those components) (Articles 8 and 9). It also addresses the handling of "living modified organisms resulting from biotechnology", emphasising both the equitable sharing of biotechnology and the management of the associated risks (Article 19). The risks posed by living modified organisms have been of particular concern to many international NGOs, and some researchers (e.g. Betsill and Corell 2008) have credited such NGOs with playing a central role in the adoption, in 2000, of the Cartagena Protocol on Biosafety. However, a number of CBD member states have not ratified this Protocol.

The inclusion of biodiversity in the Millennium Development Goals in 2000 was significant because it elevated the concept to a particularly high-level, cross-sectoral forum. Reference to it can be found in a plethora of COP decisions across a wide range of multilateral environmental agreements dating from that time (McDermott et al. 2007).

2.4.4 Theme 4: Economic development (including international trade and investment and resource transfer from developed to developing countries)

Worldwide, national economic growth and development is increasingly dependent on international trade and investment. Likewise, global trade in certain key agricultural products, most notably soy, palm oil and beef, is playing an expanding role in forest loss and degradation (DeFries et al. 2010; Rudel et al. 2009). Both the benefits and costs of development are highly unevenly distributed, an issue at the core of many conflicts in the negotiation of both trade and environmental agreements. As a result, parallel sets of goals have emerged to facilitate free trade on the one hand, and to address the unequal distribution of environmental and social costs and benefits resulting from this trade on the other.

Currently over 150 states are members of the WTO and signatories of the General Agreement on Tariffs and Trade (GATT) (WTO 2010). The WTO and its associated trade agreements promote the free trade of goods and services across national boundaries, with states required to make changes to national legislation consistent with WTO rules on pain of sanctions, requirements that are largely absent from the key forest-related environmental agreements (Eckersley 2004).

The governing norm of the WTO is trade and investment liberalisation; all businesses and investors should be free to trade with and invest in other countries without discrimination. Under the WTO principle of trade without discrimination, states cannot apply different conditions for trade and investment to different countries nor discriminate in favour of national businesses relative to foreign businesses. WTO rules help explain why many developing countries continue to retain a large proportion of their forests under public ownership (White and Martin 2002). Most of the world's most powerful timber and papermanufacturing corporations – likely to be some of the main beneficiaries of tropical-forest privatisation – are based in developed countries.

WTO agreements do, however, include provisions that allow for trade restrictions imposed with the aim of conserving natural resources. Among the

Box 2.4 Key goals concerning economic development

- Trade liberalisation and the principle of nondiscrimination (*GATT 1947, 1994*)
- The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations (UNCED 1992, Rio Declaration, Principle 3)
- Common but differentiated responsibilities (UNCED 1992, Rio Declaration, Principle 7; UNFCCC 1992, Article 3.1; UNFF NLBI 2008, Preamble)
- Develop a global partnership for development (*Millennium Development Goals 2000, Goal* 8)
- Promote trade in tropical timber from sustainable sources (*ITTA 1994/2006, Article 1*)
- Increase the proportion of forest products from sustainably managed forests (UNFF NLBI 2008, Objective 3)
- Create enabling environments for private-sector investment (*UNFF NLBI 2008, Article 6(h)*).

most important is Article XX(g) of GATT, which allows for trade restrictions on exhaustible resources, consistent with domestic laws. The status of forests under the principle of trade without discrimination is therefore unclear. GATT does not permit states to discriminate against "like products" (that is, products with similar characteristics or end uses) on the basis of their manufacture. This has been interpreted to mean that states cannot discriminate, in international trade, between 'sustainably managed' timber (however so defined) and timber from 'unsustainable' sources. So far this clause has not been tested before a WTO dispute panel. However, the 1998 shrimpturtle case brought by India, Malaysia, Pakistan and Thailand against the US, could have ramifications for forest use. In this case, the United States took action against shrimp imports from countries that used nets that did not include turtle-exclusion devices. The WTO ruled that the action was unlawful because it was aimed only at Asian and Caribbean countries, but it also ruled that the action would be legal provided there was no discrimination between countries (Sarre 2009; WTO 1998).

The principle of non-discrimination also plays an important role in environmental agreements, sometimes to very different effect. For example, Principle 3 of the 1992 Rio Declaration on Environment and Development states that current economic development opportunities should not prejudice the ability of future generations to meet their own needs. However, by definition the actors most affected by the concept of intergenerational equity (i.e. future generations) cannot enter intergovernmental negotiations and their needs, accordingly, remain only vaguely defined.

The question of equity among countries is an issue that has been advocated consistently by G77 countries. As discussed under Theme 1, this issue came to the fore at UNCED when developing countries demanded compensation for the costs of foregoing development opportunities as a result of global environmental agreements. An outcome of these demands was the introduction of the phrase "common but differentiated responsibilities". Specifically, Principle 7 of the Rio Declaration on Environment and Development states: "In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit to [sic] sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command." This concept finds further voice in Goal 8 of the Millennium Development Goals, which calls for support for developing countries in accessing resources, technologies and developed markets.

Principles 3 and 7 of the Rio Declaration on Environment and Development are taken up in Article 3.1 of the UNFCCC, which holds that "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities". The phrase 'common but differentiated responsibilities' appears verbatim in the preamble of the NLBI and is also embedded in the many decisions made under or within those environmental agreements and processes discussed in this chapter that call for the transfer of technologies and resources from developed to developing countries. Applied to forests, the concept of international equity implies different types and levels of national responsibility for addressing and reversing deforestation. But while there is agreement on the principle, there is less consensus on its practical application in and policy relevance to forests.

The ITTA 1994, and its proposed successor ITTA 2006, are the only global legally binding instrument that focus expressly on forest trade, with the overarching objective of promoting "the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests for the purpose of producing forest products" (Article 1). Its governing body, the International Tropical Timber Council (ITTC), has two caucus groups: tropical timber producer countries and tropical timber consumer countries. The timber trade is well represented at ITTC sessions, but many conservation groups ceased attending ITTC sessions in the mid 1990s over what they perceived to be the unwillingness of the ITTC and the body established to administer the ITTA, the International Tropical Timber Organization (ITTO), to focus more attention on conservation issues (Humphreys 2006).

The ITTA's focus on the tropical timber trade was carried forward and expanded to all forests in the NLBI, without the emphasis on promoting global trade. NLBI Objective 3 calls for an increase in the "proportion of forest products [sourced] from sustainably managed forests". Also notable is Article 6(h), which suggests that member states should "create enabling environments to encourage private sector investment ... in sustainable forest management". Together with NLBI Article 1(j), which emphasises the range of forest products and services (see Theme 3), this is consistent with increased global interest in private financing not only for traditional timber and non-timber forest products but also potentially for REDD+ (Lin and Streck 2009) and payment schemes for ecosystem services (Bond et al. 2009).

2.4.5 Theme 5: Social welfare (including livelihoods and poverty alleviation, access and benefit-sharing, indigenous rights and workers' rights)

This theme focuses on issues of social welfare and equity, not across generations or nations as in Theme 4 but among forest-dependent communities, indigenous peoples, forest workers and disadvantaged populations in general. An estimated 1.6 billion people depend directly on forests for their livelihoods (World Bank 2004), ranging from indigenous forest-dwellers to migrants and displaced populations engaged in a wide range of livelihood activities, such as hunting and gathering, shifting cultivation, agroforestry and the production and trade of timber and non-timber forest products. Forests are also essential for the cultural survival of many indigenous communities and directly contribute to the livelihoods of an estimated 90% of the 1.2 billion people living in extreme poverty globally (ibid.).

The key actors shaping many of the global goals related to Theme 5 differ notably from the primarily state-centric actors central to Theme 4. In his pluralist assessment of the influence of NGOs on ITTO, UNCED forest negotiations and the UNFF, Humphreys (2004) credits NGOs with a central role in introducing language on 'local communities', 'indigenous knowledge', 'the role of women' and 'the sharing of benefits that arise from the utilisation of traditional or indigenous knowledge'. Other key actor networks that have influenced goal-setting either within or outside the forest arena include indigenous peoples' organisations, the state negotiators responsible for the Millennium Development Goals, and the International Labour Organization (ILO).

The goal of protecting traditional ecological knowledge and practices appears in a number of forest-related instruments, including the CBD (Article 8(j)) and the UNCCD, which requires parties to "protect, promote and use in particular relevant traditional and local technology, knowledge, know-how and practices" (UNCCD, Article 18.2). The role of forests in cultural heritage is recognised in the 1972 World Heritage Convention (Sayer et al. 2000).

Another set of core goals relates to 'access and benefit-sharing' (ABS), a phrase first coined within the CBD in the context of access to genetic resources (Articles 1 and 15). The NLBI also adopted this concept, applying it to "traditional forestrelated knowledge and practices in sustainable forest management" (Article 6(f)). The CBD's treatment of ABS therefore appears to be relatively narrowly defined, but it has significant ramifications for international trade that potentially conflicts with the rules of the WTO. Patents on the use of genetic resources are often registered by transnational pharmaceutical, agricultural and biotechnology corporations, in many cases against the wishes of the governments of countries within which the resources have been harvested. Patents are permissible under the Agreement on Trade-Related Intellectual Property Rights (TRIPS), which requires that any royalties derived from the commercial exploitation of patents accrue to patent-holders. One interpretation of benefit-sharing in the context of forests is that such royalties should be shared with those communities that had knowledge of the properties of forest species prior to patenting and with the governments of countries that form part of the natural range of those species. While there is some measure of international agreement that benefits should be shared equitably among business corporations, governments and communities, there is so far no agreement on a formula to guide such sharing.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) takes the question of indigenous rights well beyond the issue of genetic patents. A central goal of UNDRIP is to require the "free, prior and informed consent" of indigenous people for all economic and development activities that take place on their lands and territories. This means that any such consent should be free (that is, freely given or withheld), prior (that is, obtained before implementation) and informed (that is, based on a full understanding of how livelihoods and lands will be affected). ILO Convention 169 (Article 7.1) also backs the goal of indigenous self-determination, including "the right to decide their own priorities for the process of development", although it does not mention the principle of free, prior and informed consent.

Box 2.5 Key goals concerning social welfare

- Respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles (*CBD 1992, Article 8(j); UNFF NLBI* 2008, Paragraph 6(f); UNDRIP 2007, Article 31.1; World Heritage Convention 1972)
- Promote the fair and equitable sharing of the benefits arising out of traditional knowledge and practices relevant to conservation and sustainable use [including appropriate access to those resources – CBD] (CBD 1992, Articles 1, 8(j), 15; UNFF NLBI 2008, Paragraph 6(f))
- Indigenous people have the right to free, prior and informed consent (UNDRIP 2007, Articles 10, 11.2, 19, 28.1, 29.2 and 32.2)
- Indigenous and tribal peoples have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being (*ILO Convention* 169, 1989, Article 7.1)
- Eradicate/alleviate poverty (Millennium Development Goals 2000, Goal 1; ITTA 2006, Article 1(c); UNCCD 1994, Article 4.2(c); UNFF NLBI 2008, Article 6(d))
- Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people (UNFF NLBI 2008, Objective 2)
- Allow worker freedom of association and collective bargaining; eliminate forced labour, discrimination and child labour (*The eight ILO core conventions: C-29; C-87; C-98; C-100; C-105; C-100; C-111: C-138; C-182*).

The Millennium Development Goals have been instrumental in attracting greater international attention to social welfare issues, particularly poverty alleviation, with ramifications both within and outside the forest sector. Goal 1 is notable for its strong language (i.e. to "eradicate extreme poverty and hunger") and is accompanied by specific targets. This focus on poverty is also reflected in some forest-related instruments, including the UNCCD, which also calls for poverty "eradication" (Article 4.2(c)), and the ITTA 2006 (Article 1(c)) proposed successor agreement to ITTA 1994, and the NBLI (Article 6(d)), which more modestly refer to poverty "alleviation" and "reduction", respectively.

The eight ILO core conventions are of particular relevance to the protection of workers employed in industrial forestry. They cover diverse fundamental rights, such as freedom of association and collective bargaining (C-87 and C-98), and include stipulations against forced labour (C-29 and C-105). ILO conventions C-100 and C-111 prohibit discrimination on the

basis of a variety of criteria, including race, colour, sex, religion, political opinion, national extraction and social origin (C-111). Child-labour requirements (C-138 and C-182) include various definitions and prohibitions against harmful childhood labour, setting a minimum employment age of at least 15 (or 14 for lesser-developed countries), and requiring that employment should not interfere with basic schooling.

2.4.6 Theme 6: Governance

The issue of forest governance is increasingly accepted as a core challenge facing global forestry. In many developing countries, forest tenure - that is, the distribution of rights to forestlands and resources - is unresolved and/or disputed. The laws governing forest use are often incomplete, conflicting, extraordinarily complex and/or poorly enforced (Mc-Dermott et al. 2010). Central to overcoming these challenges is the establishment of institutions and decision-making processes that are widely accepted as just and legitimate (Buchanan and Keohane 2010; Cashore 2009; World Bank 2009). All of the global agreements and processes discussed in this chapter have generated decisions addressing the institutional and procedural measures necessary to achieve their substantive goals. The focus here is not these instrumental decisions but rather the setting of global goals that define key forest governance 'problems'.

The growing international attention on illegal logging is arguably one of the most significant recent forest-related developments that has emerged largely from within the sector itself (Tacconi 2007). Key actors include coalitions of environmental groups, developed-country timber producers concerned with protecting market share, and developing countries concerned with control over their forest resources and the capture of state revenues from timber production.

The ITTA 2006 proposed successor agreement to ITTA 1994 reflects this growing consensus with an objective to strengthen "the capacity of members to improve forest law enforcement and governance, and address illegal logging and related trade in tropical timber" (Article 1(n)). The appearance of this objective in the agreement illustrates how principles in the international forest regime can be reinforced as they spill from one institution to another. The need for action to address illegal logging and the trade in illegally harvested timber was first recognised in the 1997 'proposals for action' of the Intergovernmental Panel on Forests. It was then included in the G8 Action Programme on Forests (1998-2002). In 2001 the first steps were taken in the creation of a network of regional Forest Law Enforcement and Governance

Box 2.6 Key goals concerning governance

- Improve forest law enforcement and governance and address illegal logging and related trade in tropical timber (*ITTA 2006, Article 1(n)*)
- Promote and strengthen measures, including international cooperation, against corruption (United Nations Convention against Corruption 2003, Article 1)
- Involve stakeholders/the public in resource management decision-making (*Rio Declaration on Environment and Development 1992, Principle 10; CBD 1992, Article 14.1(a); UNCCD 1994, Article 10.2(f); UNFF NLBI 2008, Article 2(c), 6(w)*)
- Guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters (*Aarhus Convention 1998, Article 1*).

(FLEG) initiatives to tackle illegal logging. To date, these FLEG processes have been most active in Asia and Africa (see the regional boxes below and Appendix 1.

In many countries, illegal logging is aided and abetted by clientelism in the public sector. An increasing confluence of actors in both developed and developing countries are now agreeing to frame this phenomenon as an issue of corruption (Singer 2009; Tacconi 2007) as well as to seek international agreements to address it. It has been argued that the sheer volume of information, money, drugs and arms flowing across borders has "destroyed the illusion of corruption as a domestic political issue to be left to individual countries" (Webb 2005). Shifting perspectives could also be due in part to influential NGOs such as Global Witness and Transparency International (Wang and Rosenau 2001) and more broadly to the growing number of developing countries and their relatively empowered citizenry that are committed to strengthening democratic processes (Keefer and Vlaicu 2008) and/or ridding themselves of rival political parties (Khan 1998). In a similar way to illegal logging, international agreements to tackle corruption first took strong shape at the regional level (Webb 2005). In 2003, the issue moved into the global sphere with the signing of the United Nations Convention against Corruption. The current global interest in REDD+ has brought the question of corruption further to the fore of international concern about forests. Addressing corruption will be a key to the success of REDD+ payments, particularly given the apparent global consensus that REDD+ payments will be coordinated by national governments.

Also connected to the development of effective governance processes is the principle that stakeholders – such as communities, farmers, local busi-

nesses and indigenous peoples - should participate in policymaking processes. This principle, championed in particular by conservation, social and indigenous NGOs and other non-governmental interests (Humphreys 2004; Tollefson et al. 2008), has gained considerable normative strength over the last several decades. It appears, for example, in the Rio Declaration on Environment and Development (Principle 10), the CBD (Article 14.1(a)), the UNCCD (Article 10.2(f)), the NLBI (Articles 2(c) and 6(w)) and the World Bank's operational policy on forests (World Bank 2002). The principle is thus a broad one that has been articulated in several legal codes and policy declarations. There is some disagreement, however, on how it should be defined and implemented. There is a distinction between consultation (which merely gives stakeholders the right to present their views) and participation (which carries with it the ability to influence decisions and contribute to the shaping of policy).

The 1998 Aarhus Convention fuses the principle of participation with two other principles: the rights of access to information and access to justice in environmental matters. The Aarhus Convention is a regional convention of the United Nations Economic Commission for Europe. Former United Nations Secretary-General Kofi Annan has commented that "although regional in scope, the significance of the Aarhus Convention is global. It is by far the most impressive elaboration of Principle 10 of the Rio Declaration ... {and} the most ambitious venture in the area of environmental democracy so far undertaken by the United Nations" (Annan undated).

2.5. Internationally negotiated conceptual frameworks for SFM

Parallel to, and distinct from, the above sets of aspirational goals and commitments established through intergovernmental negotiations are two other types of instrument that provide overarching, cohesive frameworks for assessing and/or evaluating forest management at the global to local levels. The first involves an array of regional and international processes to develop criteria and indicators (C&I) for SFM that were catalysed through global-scale agreement. These processes are unique in the intergovernmental arena in their combined focus on comprehensively defining the components of SFM (generally at the national level); their emphasis on national-level measuring and monitoring rather than normative goalsetting; and their globally initiated and supported, but regionally generated, goal-setting.

The second type of instrument, forest certification, is a market-driven approach governed by actors operating outside intergovernmental negotiations. Like the C&I processes, forest certification schemes have engaged in the comprehensive definition of SFM. Unlike the C&I processes, however, these schemes have focused expressly on the evaluation of procedural and substantive performance at the level of individual forest management units and/or associations of forest producers.

The following subsections provide a brief overview of the key actors, concepts and goals that these instruments have contributed to international forest governance.

2.5.1 Criteria and indicators for SFM

ITTO pioneered the development of international C&I with its 1992 publication of C&I for tropical forests. In the same year, at UNCED, tropical country leaders pushed for the inclusion of temperate and boreal forest issues in intergovernmental negotiations (Humphreys 2006). Consistent with this expanded focus, the Forest Principles and Agenda 21 called for the development of international criteria for monitoring national forest resources in all types of forests worldwide (Forest Principle 8(d) and Agenda 21 Objective 11.33 (a)). This spurred the development of seven regional (i.e. Pan-European Forest, African Timber Organization, Dry Forest in Asia, Dry-Zone Africa, Lepaterique, Near East and Tarapoto) and two international (i.e. Montreal and ITTO) C&I processes involving about 150 countries (Wijewardana 2008).

The creation of nine processes suggests that influential forest actors favoured a relatively decentralised approach to framing SFM. Nevertheless, the frameworks thus generated have, in turn, been used in a simplified form by global institutional actors such as the CPF as a means to link the reporting and measurement of progress across global forest-related international instruments. The core goal of the CPF is to "increase cooperation and coordination on forests" (CPF 2010) through collaborative work among 14 international organisations and secretariats with "substantial programmes on forests" (i.e. CIFOR, FAO, ITTO, IUFRO, CBD, GEF, UNCCD, UNFF, UNFCCC, UNDP, UNEP, the World Agroforestry Centre, the World Bank and IUCN; CPF 2010). The CPF Task Force on Streamlining Forest-Related Reporting (CPF 2004) analysed the nine C&I processes and found that all shared in common "seven thematic areas of sustainable forest management". These are:

- 1) Extent of forest resources
- 2) Biological diversity
- 3) Forest health and vitality

- 4) Productive functions of forest resources
- 5) Protective functions of forest resources
- 6) Socio-economic functions
- 7) Legal, policy and institutional framework.

These thematic areas have since been endorsed by the UNFF, the International Conference on Criteria and Indicators in Guatemala (CICI 2003), and the FAO Committee on Forestry. Likewise, the FAO/ ITTO Expert Consultation on Criteria and Indicators formally recognised the importance of the seven thematic areas in facilitating international communication on forest-related issues (CPF 2004).

2.5.2 Forest certification standards

As described in numerous historical accounts (e.g. Auld et al. 2008; Cashore et al. 2004; Rametsteiner and Simula 2003), forest certification was championed initially by international environmental and social organisations mostly headquartered in Europe and North America (e.g. the Rainforest Alliance, Friends of the Earth, WWF), along with a small group of sympathetic business interests (including the United Kingdom-based retail giant B&Q). The core idea behind certification was to harness the market to promote responsible forest management by awarding an ecolabel to forest products produced according to agreed-upon environmental and social standards for 'responsible' forestry. It is notable that a number of the early promoters of forest certification first explored the development of timber labelling within both ITTO and the International Organization for Standardization (ISO - a global consortium of national standard-setting bodies). In the case of ITTO, tropical-country negotiators objected to even the voluntary labelling of tropical timber on the grounds that it constituted a barrier to trade. In the context of the ISO, industry interests eschewed specific performance standards in favour of a systems-based approach that allowed businesses to establish their own performance thresholds (Elliott 2000).

The FSC thus emerged in 1993 as a new, globalscale, non-governmental organisation with a governance structure that excluded government participation and strictly limited the influence of actors with a direct economic interest in the production and sale of forest products. Within the parameters of this structure, the FSC produced ten principles and criteria that define responsible forestry worldwide. The ten principles echo a number of the issues that conservation and social-welfare NGOs have been instrumental in framing and promoting within global intergovernmental processes (e.g. see theme 5). They are:

- 1) Compliance with laws and FSC principles
- 2) Tenure and use rights and responsibilities
- 3) Indigenous peoples' rights
- 4) Community relations and worker's rights
- 5) Benefits from the forest
- 6) Environmental impact
- 7) Management plan
- 8) Monitoring and assessment
- Maintenance of high-conservation-value forests
 Plantations.

The launch of the FSC sparked considerable controversy among forest industry and government actors, who questioned the authority of the FSC to define and evaluate appropriate forest practices (Cashore et al. 2004; Elliott 2000; Meidinger et al. 2003). In response, a number of forest producer associations in North America and Europe formed competing certification schemes, sometimes with the involvement of government agencies and/or national industry standards organisations. Many such schemes have since united under the umbrella of the PEFC, which began as a European scheme and was re-launched in 2003 as a global organisation. In contrast to the FSC, the PEFC has not established a global performance standard. Instead, it endorses certification scheme standards on the basis of their consistency with the regional and international C&I processes discussed above.

In a further example of public/private goal diffusion, support for voluntary timber labelling schemes is now expressly stated in some global intergovernmental processes, including those that were initially resistant to the idea. For example, the NLBI calls on state actors to "encourage" the development of private voluntary instruments "such as voluntary certification systems" (Article 6(x)), and certification is similarly mentioned in the ITTA 2006 (Article 1(o)).

2.6. Regional processes and their interaction with global forest-related goals

The following boxes provide examples of key goals and associated processes that have emerged at the regional level in Africa, Asia, Europe and Latin America. The intent of this analysis is not to be exhaustive but rather to illustrate ways in which regional processes may serve to translate and internalise global commitments into regional contexts, to establish regionally specific priorities, and/or to provide alternative goal-setting venues in areas where global consensus has not yet been reached (e.g. the EU's proposed legally binding agreement on forests).

Box 2.7 African regional agreements

Theme 2: Biological diversity

• The African states, under the African Convention on the Conservation of Nature and Natural Resources, established, as a fundamental principle, the adoption of the measures necessary to ensure the conservation, utilisation and development of soil, water, flora and faunal resources in accordance with scientific principles and with due regard to the best interests of the people (Article 2).

Theme 5: Social welfare

• The African Union, the African Development Bank and the Economic Commission for Africa are jointly implementing a regional initiative to develop a Pan-African Framework on Land Policy for Securing Rights, Enhancing Productivity and Improving Livelihoods.

Theme 6: Governance

- The New Partnership for Africa's Development (NEPAD), established in 2001, is a programme of the African Union. The action plan of NE-PAD's environment initiative is a region-wide framework for, among other things, promoting the sustainable use of African natural resources and improving the institutional framework for regional environmental governance. The African Ministerial Conference on the Environment monitors the implementation of the plan.
- The African Forest Forum is being established as a mechanism to mobilise and represent African voices in international forest platforms such as the UNFF.
- The Ministerial Declaration arising from the Ministerial Conference on African Forest Law Enforcement and Governance in 2003 commits to fighting illegal logging and improving laws and regulations, forest-sector governance and local development.
- The Central African Forests Commission, a ministerial consortium established under the legal authority of the 1999 Yaoundé Declaration, coordinates forest governance and conservation efforts across Central Africa.
- Ghana, Congo and Cameroon are the world's first countries to sign voluntary partnership agreements (VPAs) under the EU Forest Law Enforcement, Governance and Trade (FLEGT) process. The VPAs were signed in 2008, 2009 and 2010, respectively.

Box 2.8 Asia-Pacific regional agreements

Theme 1: Forest extent and land-use change

• The Asia-Pacific Economic Cooperation (APEC) Leaders' Declaration on Climate Change, Energy Security and Clean Development (Sydney, Australia, 2007) indicates a regional aspirational goal of increasing forest cover in the APEC region by at least 20 million hectares of all types of forests by 2020.

Theme 2: Biological diversity

- The ASEAN Agreement on the Conservation of Nature and Natural Resources (1985) aims to promote the maintenance of essential ecological process and life-support systems, preserve genetic diversity, and ensure the sustainable utilisation of harvested natural resources.
- The ASEAN Declaration on Environmental Sustainability (2007) states the aims of achieving, by 2010, a significant reduction in the current rate of loss of biodiversity, conserving the rich biodiversity in ASEAN member states, strengthening efforts to implement the ASEAN Regional Action Plan on Trade in Wild Fauna and Flora, and promoting the conservation and sustainable management of key ecosystems, including forest, coastal and marine habitats.

Theme 6: Governance

The Ministerial Declaration arising from the 2001 Ministerial Conference on Forest Law Enforcement and Governance in East Asia committed countries from the East Asian and other participating regions to:

- "Take immediate action to intensify national efforts, and to strengthen bilateral, regional and multilateral collaboration to address violations of forest law and forest crime, in particular illegal logging, associated illegal trade and corruption, and their negative effects on the rule of law" (Paragraph 9)
- "Review existing domestic forest policy frameworks and institute appropriate policy reforms, including those relating to granting and monitoring concessions, subsidies, and excess processing capacity, to prevent illegal practices" (Paragraph 18).

Box 2.9 European regional agreements

Theme 3: Biodiversity

- The goal of the legally binding Bern Convention is "to conserve wild fauna and flora and their natural habitats", especially focusing on cooperation in protecting endangered and threatened species in Europe. The parties to the Convention specify their respective species in the annexes to the Convention.
- The EU's Natura 2000 network also aims to protect natural habitats and related species. Based on two directives it designates conservation areas in EU member states and establishes a legally binding protection status for them. The Council of Europe's Emerald Network of Protected Areas strives for the same goal in non-EU European countries.

Theme 6: Governance

- At the Fourth Ministerial Conference on the Protection of Forests in Europe, the European countries decided "to strengthen synergies for SFM through cross-sectoral cooperation and national forest programmes". They adopted a common approach to national forest programmes in Europe and committed themselves to developing and implementing those national forest programmes accordingly.
- In its FLEGT Action Plan the EU has set the goal of combating illegal harvesting and illegal timber trade in environment and development cooperation policies. Consequently, it adopted a regulation on a FLEGT licensing scheme for imports of timber that allows the control of timber trade with countries entering into a VPA. To date, three VPAs have been concluded, seven are in negotiation and about 15 other countries have indicated their interest in participating in a VPA. In addition, an EU regulation prohibiting the sale of illegally harvested timber in the EU and requiring operators to exercise due-diligence procedures to ascertain if products are legal is close to adoption.
- FOREST EUROPE (previously known as the Ministerial Conference on the Protection of Forests in Europe) has started a discussion on the potential added value of and possible options for a legally binding agreement on forests in Europe. A working group has been established and is preparing proposals for the next Ministerial Conference, to be held in June 2011. A group of like-minded countries in favour of a legally binding agreement has initiated the process in reaction to developments in global forest governance in recent years. As yet, however, there is no agreement to negotiate such an agreement; several signatories of FOREST EUROPE commitments are hesitant to take this step, while others are waiting to see its possible content and legal characteristics.

Box 2.10 Latin American regional agreements

Theme 1: Forest extent and land-use change

In 2008, Central American countries completed a Regional Agri-environmental and Health Strategy 2009-2024, which was formulated by an inter-ministerial technical committee comprising the ministries of agriculture, environment and health of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panamá. The goals of this strategy include sustainable land management, improving regional capacities for adapting to climate change, and promoting biodiversity conservation and traditional knowledge. The implementation of the strategy is led by the Inter-sectoral Council of Ministries of Agriculture, Environment and Health of Central America, supported by the Tegucigalpa Protocol (Article 16). In the context of this strategy, the Central American countries, with German support, have initiated a process of consultation to design common compensation policies for avoided deforestation.

Theme 3: Biological diversity

• In 2002 the Andean Council of Ministries of Foreign Affairs, comprising representatives of Bolivia, Colombia, Ecuador, Peru and Venezuela (although the latter is no longer a member), approved a regional biodiversity strategy (Decision 523). This strategy aims to contribute to the generation of economic development alternatives based on sustainable natural resource management and the formulation of common regional positions in international negotiations on biodiversity conservation. In 2010, the four countries of the Andean Community of Nations initiated a Regional Program of Biodiversity in the Andean–Amazon region.

Theme 6: Governance

• The EU FLEGT facility has carried out scoping missions in Ecuador, Colombia, Guyana and Bolivia to discuss possible VPAs.

2.7. Conclusion: Conflicts, gaps and synergies

This chapter has mapped the core substantive issues and actors that currently shape international forest governance. As highlighted by the initial theoretical overview of actor networks, different lenses may be used to view the social construction of international forest-related goals. Increasingly, however, the transgovernmentalist and pluralist perspectives offer critical insights into the cross-sectoral, multi-scale (e.g. global and regional) and non-state actor networks that shape global forest strategies.

Given this complexity, and the amount of time and energy this diverse array of actors invests in competing and/or cooperating in the definition of the global agenda, it is easy to lose sight of the core forest challenges that international forest governance aims to address – in other words to 'fail to see the forest for the trees'. The comprehensive mapping of the core substantive issues, we argue, is essential to bring attention purposefully and holistically back to the forests and to the communities that depend upon them.

As explained in the introduction, there is no universally agreed framework for creating a definitive map, and the landscape of key actors and goals is both dynamic and contested. Nevertheless, we argue that our assessment serves to highlight the following points:

 An increasingly comprehensive suite of goals has emerged to guide international forest governance.

A plethora of international goals has been agreed within each of the six broad themes discussed above. These goals may conflict at times, and there is wide variation in the level of political commitment and resources available to fulfil them. Nevertheless, their articulation within widely recognised international institutions indicates a substantial sharing of norms. These shared norms and associated aspirational goals could provide a foundation for holistic international action on forests. However, ongoing conflicts over such fundamental issues as how to define a forest, how to prioritise environmental, social and economic objectives, and whether or not there is a need for legally binding commitments have greatly constrained the translation of aspirational goals into coordinated mandates for on-the-ground action.

• The comprehensiveness of international forestrelated goals is the result of power struggles over ideas and resources involving a wide diversity of actors and institutions. Diverse environmental and social non-governmental organisations have played critical roles in expanding the scope of global agreements around forests, particularly in regards to issues of biodiversity conservation and human rights. These actors have also generated new institutions to by-pass stalled governmental processes and have catalysed competing efforts among the commercial private sector, thereby broadening the level of societal engagement in forestrelated decision-making.

 Many actors that play key roles in forest change lie outside the forest sector and have not been engaged in forest-related negotiations.

Many of the greatest challenges for sustaining the world's forests lie outside the forest sector in the growing demand for agricultural products, biofuels, non-renewable materials and energy; urbanisation; and climate change. Forest-sector activities and policies interact with these other economic drivers by altering the value of forests relative to other land uses, thereby either facilitating or dis-incentivising forest conversion. Yet forest-related processes have generally failed to generate cross-sectoral communication and collaboration among the full range of producers and consumers who are driving forest change.

• Regional and non-governmental processes provide pathways for bypassing stalled global-scale agreement.

Global-scale processes have frequently become locked in debates over the desirability of legally binding commitments to slow forest conversion or promote SFM. Meanwhile, various regional forums and non-governmental forest certification schemes have made significant progress in framing and implementing relatively comprehensive approaches. These processes are limited, however, in their ability to address drivers outside the forest sector.

 Greater coordination is needed and requires a widespread perception of common interest coupled with legitimate environmental and social safeguards.

Our analysis suggests that widespread norm diffusion across a broad array of actors has occurred, although purposeful holistic coordination is currently the exception rather than the rule. The diffusion of ideas across both state and non-state actor networks at the global and regional levels is such that priorities rejected by one actor network may be taken up by another and may ultimately achieve widespread acceptance (e.g. forest certification and regional initiatives to stop illegal logging).

The forest-climate linkage appears to represent

the most significant case of cross-sectoral, globalscale coordination around forests via the incorporation of natural forests into emissions reduction targets. This linkage could incentivise substantial public and private investment in reversing deforestation by changing the economic incentives driving forest conversion. In this way, REDD+ appears to offer a potential 'win win' solution for simultaneously advancing environmental conservation and socio-economic welfare.

While the use of market-based measures to finance REDD+ may enhance legitimacy among many state and private-sector actors, it may simultaneously undermine legitimacy among others, including those lacking a market advantage or those opposed to the monetisation of the full range of forest values. The inclusion of environmental and social safeguards will be essential for achieving widespread acceptance of REDD+ and any future strategies that may emerge to incentivise and coordinate the international governance of the world's forests.

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