8 Conclusions

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8.1 Introduction

International forest governance today is complex, fragmented and producing mixed results. On the one hand, there is increasing awareness of the threats to forests and numerous efforts have emerged at all levels that attempt to address these threats. Sustainable forest management has maintained a place on the international agenda since the United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro in 1992. The Non Legally Binding Instrument on All Types of Forests has been struck. The many other elements of the international forest governance architecture continue to proclaim the critical importance of forests and the international community spends billions of dollars annually on regional, national and local programmes for sustainable forest management. Nevertheless, the world is still losing an estimated 13 million hectares of forest per year; this is only the most obvious symptom of the fact that, not withstanding the growth of awareness and initiatives, international forest governance is struggling to meet a number of significant contemporary challenges.

This report has argued that instead of asking how international forest governance can be restructured into a simplified top-down regime, reformers should embrace complexity as a necessary feature of governance arrangements. Actors must be prepared to live with a certain degree of fragmentation as the price for maintaining complexity and coverage. The task of governance reform is to ensure the development of more synergistic and cooperative relationships between the components of the governance arrangements even as the challenges become more urgent and intense.

First among these challenges is the demand for agricultural commodities and timber, which will continue to increase as the world population grows and becomes wealthier. By 2050 the world population will be 9 billion; feeding them in the face of climate change and economic and financial crises will increase the pressure on forest lands worldwide, especially if agricultural productivity is not increased (FAO 2009). Under a 'business as usual' scenario it is estimated that around 60% of tropical forest could be at risk of deforestation over the long term (Terrestrial Carbon Group 2009). International forest governance arrangements that continue to support the implementation of sustainable forest management are an important part – but only a part – of the larger picture. Improvements in agriculture productivity and more sophisticated land-use management systems that account for the cumulative impacts of all uses are also important and must somehow be accommodated within the larger governance arrangements.

Some have argued that nothing less than a paradigm shift in the way land is used and commodities are produced will address these challenges. International forest governance has certainly shifted over time to address emerging priorities, many of which have been hailed as this elusive new paradigm. Such priorities have shaped - and reshaped - the view of forest policy, changing it variously from a 'commodity issue' to, among others, a 'biodiversity issue', a sustainable development issue' and 'a human rights issue'. As a result, international forest governance is now connected with human well being, both for forest and non-forest dwellers; international trade; human health; economic growth and development; natural resources and ecosystem health; and human security (Chapter 2).

But this re-shaping has not been transformative. The older paradigms have not disappeared, often because they provide benefits for and are supported by powerful interests (chapters 3 and 5). Instead, the new goals and priorities, and the instruments associated with them, have been stacked on top of each other in a process known as layering. With layering comes drift, in which goals and instruments designed for earlier and different contexts are allowed to survive unmodified in the new era, with increasingly unpredictable but usually sub-optimal consequences (Mahoney and Thelen 2010; Streek and Thelen

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2005). Layering and drift are among the most common causes of fragmentation (Chapter 6).

For this reason, despite the many serious challenges facing international forest governance, this report does not call for another paradigm shift, which would simply add another layer to the existing governance arrangements. It is certainly important to match the complexity of the governance arrangements to the complexity of the problems and to manage, rather than seeking to eliminate, complexity. However, embracing and managing complexity will be made more, not less, difficult if yet more highlevel goals and instruments are added to the governance architecture.

Rather, this report draws on a growing body of literature that emphasises the importance of progressive incremental change supported and directed by policy learning (Cashore and Howlett 2007). A series of small steps, if undertaken in a consistent and intentional direction, will, over time, add up to a significant degree of policy change. Progressive incremental change is easier to manage, less likely to result in layering and drift, and much more capable of delivering viable new governance architecture than the adoption of whatever 'big idea' is currently capturing the imagination of the forest policy community. The governance challenge is thus how to ensure that these incremental steps are progressive and lead in a desired direction, rather than the aimless series of disjointed and counterproductive steps that is, all too often, the consequence of fragmentation.

The key driver of progressive incremental change is policy learning, which is "a deliberate attempt to adjust the goals or techniques of policy in response to past experience and new information" (Hall 1993: 278). The policy learning required here is known as instrumental learning, in which evidence about the effectiveness of particular policy instruments is constantly monitored and updated, resulting in continuous incremental change in instrument mixes and settings. This kind of iterative updating is not fortuitous but "the result of analysis and/or social interaction" (Radaelli 2009: 1147). Where the context is one of complex problems and multiple institutional intersections, as in international forest governance, special emphasis will need to be put on learning about improved institutional configurations, intersections and instrument mixes (Cashore and Galloway 2010).

The current set of international forest governance arrangements is not well placed to promote instrumental learning of this kind. There is a gap between the high-level, state-centred negotiations that have contributed to treaty congestion and the stalemate that has formed in recent months in key parts of the regime complex and the huge variety of local, national and regional efforts to improve forest conditions and livelihoods on the ground (Hoogeveen and Verkooijen 2010). High-level negotiations have a central place in international forest governance, not least because they allow the development of the norms and values that provide the 'compass' for governance – that is, the direction in which the actors agree to move. However, the hopeless attempt to *compel* movement in a desired direction has absorbed the energy of negotiators and incited further demands for greater centralisation and top-down coordination at exactly the time when non-state actors of all kinds have become more prominent.

An unbalanced focus on state-centred negotiations alienates non-state actors. States are no less important today than they were in the past, but they are no longer the only group of actors that takes part in forest governance (Chapter 1). Now that issues have multiplied and the interconnections among them have grown more complex (Chapter 2), other actors, including international organisations, privatesector corporations, civil-society organisations and consumers, are all central players in the design and implementation of forest policy.

This heterogeneous group of actors has resisted top-down coordination by legally binding rules. Some actors have created parallel processes of standards-setting, stakeholder engagement and forest management from which important lessons can be learned. However, the prevailing atmosphere of competing governance modes, clashing values and alternative management systems makes it hard for anyone to admit to the inevitable mistakes and failures that are often the most important inputs into adaptive management and policy learning (Armitage et al. 2007; Dodgson 1993). If instrumental learning is to take place successfully, reformed international forest governance arrangements need to bridge the wide gaps that have opened up between high-level negotiation on one side of the divide and experimentation on the ground on the other.

This report concludes with suggestions for bridging the gaps from both sides of the divide. On the side of high-level negotiation, we join the call for a new kind of international forest diplomacy, one better adapted to the realities of complex and fragmented governance. On the other, we propose a new kind of learning architecture that harnesses the extraordinary energy and commitment of individuals and organisations working to improve forest livelihoods and conditions on the ground. Underpinning both these suggestions is a broad vision of forests: the services that they provide, their interactions with other ecosystems and policy sectors, and the complex socio-economic linkages that drive human-induced forest change. For reasons that will become clear in the following section, we call this broad, all-round vision of forests 'forests+'.

8.2 Forests+: the lessons of the climate change debates

There is now widespread recognition that forests are critical components of global climate change mitigation and will require careful attention in the development of national climate change adaptation strategies. The priority that the international climate change regime now gives to the role of forests has generally been welcomed by traditional forest governance actors. Key climate change instruments, such as the United Nations Framework Convention on Climate Change (UNFCCC), together with the Kyoto Protocol and its mechanisms, are now considered central parts of the international forest regime complex (Chapter 3). The prospect of an infusion of new money for projects to reduce emissions from deforestation and forest degradation (REDD) further raised enthusiasm for exploring the intersection between forests and climate change, to the point where there was a danger that other functions of forests would be neglected. REDD threatened to become a classic example of another 'big idea' that added a new layer of complexity to international forest governance without producing corresponding gains in coherence or consistency (Chapter 6).

However, as REDD became a key plank of global climate change mitigation policies, the scale of the governance problems raised by REDD were quickly revealed. As noted in Chapter 2, REDD was part of a trend away from attempts to regulate behaviour directly towards market-based instruments designed to provide incentives by attaching monetary values to socially desirable goods. As such, REDD quickly ran into the difficulties posed by the need to safeguard the many social and environmental values of forests that are currently not well-expressed in monetary terms. And, as discussed in Chapter 5, REDD opened up fundamental conflicts about the meaning of a 'forest', including the long-running debate about the relative merits of natural and planted forests.

At the same time, the potential role of REDD in international emissions trading schemes (the existence of which is further evidence of the popularity of incentive-based instruments) remained very much in question. The problems posed by the measurement of forest degradation and by the need to set baselines for avoided deforestation dogged REDD from its inception and contributed to a marked lack of progress in recent negotiations. It became clear that, for progress to be made at all, negotiating parties needed to 'step back' and take a larger view of the role of forests in mitigation strategies; thus, REDD+ - which goes beyond simply addressing deforestation and forest degradation to include forest conservation, the sustainable management of forests and the enhancement of forest carbon stocks - was born. As described in Chapter 3, REDD+ has contributed to the dissolution of REDD into a heterogeneous set of projects, policy initiatives and funding mechanisms. The multilateral mechanisms that have been established, including the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, the Forest Carbon Partnership Facility, the World Bank's Forest Investment Programme and the REDD+ Partnership, exist alongside loosely coordinated national, bilateral and private efforts. The latter are likely to survive even if REDD+ fails to become part of a global emissions trading scheme.

The trajectory from REDD to REDD+ illustrates many of the themes of this report. In particular it is clear that, in international forest policy, dispersed local knowledge, scientific uncertainty, value conflicts and the creative responses of policy actors to each new round of policy interventions all combine to create the open-ended 'wicked' problems described in Chapter 1. Making progress towards solving these problems requires replacing the outmoded idea of arriving at and enforcing an optimal solution by closer attention to sequential trial and error that focuses on "the processes that generate policy innovations and spread them over jurisdictions" (Kerber and Eckardt 2009: 228). From this latter point of view, complexity and diversification create more trials and hence more possibilities of success and failure, introducing an evolutionary logic to policy learning.

Forests+ is simply the next step on this trajectory. It is an attempt to create a governance framework that captures all forest values and cross-sectoral linkages and ensures that they are considered in decisions about forest policy and management. To do so, forests+ must encourage the widest variety of frames and discourses (Chapter 4) about forests. Forests+ would also promote experimentation and provide a safe and trusted arena in which failures, as well as successes, can be discussed freely and lessons learnt. It would also coordinate the complex elements of the governance architecture over multiple levels, both vertically and horizontally.

8.3 A new diplomacy for global forest governance in an era of forests+

A forests+ diplomacy consists of the following five building blocks.

8.3.1 Appropriate scale and subsidiarity

International forest governance has been too focused on the global level. The recognition that not everything can be resolved within the United Nations system has two implications for a new model of international forest governance. First, while not all issues can be resolved within the United Nations, some issues certainly can; possibly, certain issues can *only* be resolved from there. Second, it implies that the first step in the forests+ diplomacy should be to determine the most appropriate level of discourse and action in a system of multi-level governance. As argued in Chapter 6, all actors should commit to exploring the principle of subsidiarity in an effort to find these appropriate levels.

8.3.2 Coordination by learning

International forest governance has evolved into something far more complex than it was even a few years ago. The proliferation of arenas in which forest governance is being discussed has already led to significant problems of overlap, ambiguity and duplication (Chapter 2). While multiple arenas provide the ability to experiment, they also require a system of inter-arena coordination. In the first instance, this coordination function should be built primarily on information instruments; later, it should be built on a mix of information and incentives (chapters 6 and 7).

8.3.3 Intelligent stakeholder participation

For forests+ to be implemented effectively, new and innovative ways of thinking are needed on what 'participation' in international forest governance really means for different actors. A critical determinant of success for more effective international forest governance is to invest in a new diplomacy that allows multiple opportunities for actors to be involved at the levels at which they have most competence. Our proposition is not to categorically exclude some actors from global diplomacy. Nevertheless, we should depart from the widely shared notion that 'all relevant stakeholders' should be involved in all policy decisions. More participation is not always better, and multidimensional models of stakeholder engagement are now widely available that can be tailored to specific policy needs in complex environments (Fung 2006).

8.3.4 Policy instruments: a portfolio approach

The governance challenge for the future is not one of negotiating a new super-instrument but of coordinating multiple existing and future initiatives. A range of both hard-law and soft-law instruments, with an immediate emphasis on the latter, is likely be a more effective approach to governance than a single comprehensive hard-law instrument. Such a portfolio approach could involve the use of a combination of initiatives to raise financial resources, increase knowledge, develop capacity, generate public support and raise awareness for effective global action on forests (Hoogeveen et al. 2008). To be effective, such an approach must be combined with experimentation and learning in a constantly evolving adjustment to new conditions.

8.3.5. Leadership by policy entrepreneurs

It is sometimes argued that what is ultimately lacking in international forest governance is 'political will', a claim usually associated with a strong belief in a single, optimum solution to forest problems that only needs to be imposed on everyone for its merits to become unassailably clear. What is really missing, however, are policy entrepreneurs, leaders who "work from outside the formal governmental system to introduce, translate, and implement innovative ideas into ... practice" (Roberts and King 1991: 152). They are missing largely because the increasingly formal structures of diplomatic negotiation have little place for policy entrepreneurship. As a result, much of the policy innovation that has actually taken place in international forest governance has been at the margins, with non-governmental organisations (NGOs) in the lead. A new diplomacy would be incomplete without finding a home for policy entrepreneurship and more research is needed on the kind of governance structure that would welcome policy entrepreneurs and encourage their work.

8.4 A new learning architecture for forests+

The other main thrust of governance reform is to encourage the conditions under which experimentation and trial and error actually lead to policy learning and improved outcomes. In the first instance, this task is best performed by de-emphasising both regulatory and incentive instruments in favour of information. In the longer term, as this report has emphasised, the goal is to find creative instrument mixes with proven effectiveness on the ground (Chapter 7). The choice of these instrument mixes, in which regulation, incentives and information are mutually supportive, will be based on a clear understanding of the incentives that they provide and the likely strategic reactions of actors to those incentives. At present this knowledge is lacking, except in piecemeal and local instances, and the immediate task is to build a learning architecture that can provide it.

The new learning architecture will need the following components.

A more comprehensive approach to knowledge management

Policy learning through trial and error requires a comprehensive clearing-house mechanism for forestfocused and forest-related research. These clearing houses often exist at national and regional levels (the Association of South-East Asian Nations (ASEAN) Forest Clearing House Mechanism is a particularly strong example of the latter that could be drawn on as a model; Goehler and Schwaab 2008). A number of international organisations, especially those with explicit research mandates such as the International Union of Forest Research Organizations and the Center for International Forestry Research, can also provide insights. The challenge here is largely a technical one involving high-level commitments to support the imaginative use of appropriate information and communication technology, much of which is already in place at the national level as part of a general trend towards digital government.

A networked approach to learning

Improved knowledge management does not necessarily lead to learning, however. To ensure learning, processes are needed for identifying policy-relevant knowledge (as well as knowledge gaps) and for communicating that knowledge and translating it to ensure that it is relevant in different contexts. The core ideas of support for and bridging between knowledge generation and knowledge use lead to the concept of a learning platform – defined as an integrated set of services that provide information, tools and resources to support policy learning. As the ASEAN experience has shown, in addition to the technical challenge of creating a clearing house, learning platforms need to bring together the bottom-up tools of inter-organisational network management and the top-down impetus provided by access to key decision-making and coordinating bodies (Chapter 6).

From one side, then, forest policy learning platforms will be built on a wide variety of existing and future networks, the members of which need to trust the platforms and their organisational structure (Borgatti and Cross 2003; Bessant and Tsekouras 2001). As argued in Chapter 7, the most successful examples of these networks are those organised at appropriate scales around a particular problem. A problem-focused approach is an important part of the motivation for network membership and participation and provides the opportunities for coalitionbuilding that provides political support for solutions (see 8.1). These networks survive and prosper by meeting the needs of their members and, to the extent that they are learning networks, by doing the work of knowledge generation, communication and translation (Knight 2002; Lin 2005). The extent to which they are the essential building blocks of a global learning platform cannot be overemphasised. The key to successful governance is to coordinate and support their activities rather than to attempt to direct them.

Improved network management

Nevertheless, there are a number of reasons why we do not expect the learning platforms to be built completely from the bottom up. First, the theory of inter-organisational networks stresses the importance of trust between network members as a key requirement for shared network management (Provan and Kenis 2007). Given the history of conflict between and parallel development of NGO and state-led forest networks, we expect that, initially, trust will be low. Creating the circumstances in which these disparate networks will be willing to share knowledge and to trust the source will take time. At the outset, a lead organisation or a specialised network administrative organisation will be required and the key question is whether to create a new organisation or to add this responsibility to the mandate of an existing organisation.

Second, as already noted, the policy learning literature emphasises the critical role of policy entrepreneurs in promoting policy innovation (Mintrom 1997). Entrepreneurship in this context means not only being alive to the possibilities of new ideas but also building trust in the competence of a learning platform and its ability to deliver successful outcomes. As noted in Chapter 4, we know little about the conditions under which this kind of leadership flourishes.

Box 8.1 UN Global Compact

The UN Global Compact was launched in 2000 as a voluntary initiative that seeks to advance ten universally accepted principles in the areas of human rights, labour environment and anti-corruption. It is a public-private initiative and a strategic policy platform/framework for companies endorsing sustainable development and responsible business practices. All participants have to align their operations and strategies with the ten principles.

It has 2 objectives:

- Mainstream the ten principles in business activities worldwide
- Catalyse actions in support of broader UN goals, including the Millennium Development Goals

The Global Compact aims at involving all relevant social actors: companies, whose actions it seeks to influence; governments, labour, civil-society organisations. The UN acts as facilitator and the UN agencies involved are working with Global Compact on their specific issues. Currently, about 8000 participants have joined the initiative, including over 5300 businesses in 130 countries.

Global Compact works at global, regional levels, local levels creating networks around the world in order to share best and emerging practices, access knowledge and experience with sustainability issues and utilise tools and resources.

The UN General Assembly and other intergovernmental platforms, including the G8, support Global Compact and recognise its work and outcomes in relevant documents.

The UN Global Compact has many features of a policy-learning platform. It provides open access to all actors and links relevant sectors. The initiative also creates networks/platforms at all levels, promoting problem based policy learning. While Global Compact does not intend to develop national or international policies per se, it allows the discussion of respective policies and instruments. UN bodies are coordinating the linkage of Global Compact work with other global policy fora.

Finally, the experiences of both ASEAN and the European Union suggest the importance of access to the fora where decisions are taken and policies are made. Networks are not an end in themselves and the network literature emphasises that the most productive networks are embedded in traditional hierarchical organisations with the authority to take and implement decisions (Agranoff 2006; Hill and Lynn 2005). While learning platforms are needed, we emphasise that what is missing from current arrangements is not so much the capacity to generate knowledge as to communicate and translate it. Direct access to decision-makers may be one route; another may be access to those whose voice carries weight for other reasons (see Box 8.2).

Better use of e-governance tools

The final component of the new learning architecture will be the use of networked technologies as governance instruments. The lead organisation mentioned above can improve both network participation and coordination by the creative use of information and communication technologies for the coordination and 'reintegration' of fragmented responsibilities (Dunleavy et al. 2005; Margetts 2009). Web presence has become increasingly important for the credibility and effectiveness of actors in international forest governance and much can be learned from the way in which they have contributed to the legitimacy and authority of each other by linking content from their websites.

Because of network effects, trusted nodes in information networks quickly rise to dominant positions by exploiting the tendency of new members to engage in preferential rather than random attachment when they join the network (Barabási 2000). Preferential attachment explains the (literally) exponential success of sites such as Facebook and Google and the struggles that national governments have had in competing for attention on the web. Preferential attachment can create distinctive virtual policy networks (VPNs), which are "web-based issue networks that are structured through the hyperlink connections of websites containing content on a specific policy topic" (McNutt 2010).

Preferential attachment also creates the phenomenon known as nodality, which is "the property of being in the middle of an information or social network" (Hood and Margetts 2007: 3). E-governance is simply the instrumental use of nodality and the authority that it confers to engage in the classic activity of governance: that is, coordination to shape outcomes. To the traditional use of web-enabled learning platforms to evaluate information, transfer knowledge and promote policy learning is thus added the ability to shape policy debates by structuring alternatives and connecting actors and organisations who may be widely dispersed geographically and ideologically. Nodal actors have greater access to

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Box 8.2 United Nations Secretary-General's Advisory Board on Water & Sanitation (UNSGAB)

The UNSGAB was established by the Secretary-General in 2004 with the intention to galvanise global action and sanitation issues. Its mission is to give advice to the SG, give input in global dialogue process, raise global awareness, influence global, regional and national institutions at highest level, and to take action towards the Millennium Development Goals (MDGs).

UNSGAB's main objectives are to:

- Mobilise resources for water and sanitation
- Mobilise public support
- Assess progress
- Advocate for improving the capacity of governments and the international system

The Board is composed of individuals, who are dignitaries and high representatives from politics, financial institutions and research institutions.

The main policy tool is the Hashimoto Action Plan launched in 2006. It identifies actions for key players ("Your Actions") and work for UNSGAB ("Our Action") in cooperation with these players and in removing obstacles impeding achievement of internationally agreed targets. It is seen as a global work plan for advancing progress towards the MDGs.

UNSGAB members are using their influence and knowledge to fulfil their Actions, while continuing to pressure international stakeholders. Activities are mainly focusing on promoting the issue in different fora and institutions as well as its inclusion in documents and related policies. UN-SGAB specifically aims at influencing high-level decision-makers.

The general goal to facilitate global action on a rather complicated and cross-sectoral issue of high social relevance is similar to the forest issue and the intentions of forest+, but UNSGAB currently lacks some features of a policy-learning platform. Specifically, there is neither open access for all actors nor participation from actors from all relevant sectors. While UNSGAB tries to influence ongoing policy development and implementation, it is currently a high-level inter-sectoral lobbying group rather than a policy-learning platform.

the resources of the network, more opportunities for information exchange and the creation of trust, and an enhanced ability to control the way in which information flows through the network.

Successful e-governance will only be possible if the organisation or organisations that undertake network management and other coordination activities achieve and maintain nodality in the global forest policy web. In this respect the situation is promising because nodality is currently shared by the websites of a small number of international organisations and governments, the latter including the European Union; together they form the backbone of a VPN (McNutt and Rayner 2011). The major weakness of this VPN is the almost complete absence of links to and from NGO websites, which are organised in separate issue networks; this situation mirrors the divide in face-to-face networks. An emphasis on a more problem-focused approach to governance may pay dividends in e-governance by leading to the development of a more inclusive VPN.

8.5 Institutional change

The formulation of specific recommendations for institutional change in international forest governance is beyond the terms of reference of this report. Nevertheless, it is useful to summarise the key functions than a lead organisation or system of collaborative governance will need to perform. Such an organisation or system should:

- Support the principle of subsidiarity in decisionmaking as described in Chapter 6. High-level diplomacy should be applied only to problems that require goal-setting at this level. As concluded in Chapter 2, regional and non-governmental processes have provided critical pathways for bypassing stalled international negotiations. A new organisation needs to work with this dynamic rather than against it.
- Be committed to supporting problem-focused evolutionary learning (Chapter 7). It should be capable of providing the open, deliberative arenas called for in Chapter 4 in which very different forest discourses can co-exist. It must be capable of undertaking network management at a global level and supporting the learning platforms described in this chapter.
- Have an all-round forests focus and act as a champion for improving conditions and livelihoods in all types of forests. It should acknowledge the

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Figure 8.1 The global forest policy VPN (McNutt and Rayner 2011)

existing integration of the language of sustainable forest management into the major instruments of international forest governance and the work already under way to produce indicators of improvement in varying contexts (Chapter 5). Intelligent engagement with other actors outside the professional forestry community and openness to other discourses is necessary if sustainable forest management is to serve a coordinating function with other sectors in support of forests+ (Chapter 3).

Have a strong mandate to coordinate forest-related activities wherever they may take place. As noted in Chapter 2, forest-related processes have generally failed to generate adequate cross-sectoral communication and collaboration among the full range of actors who are driving forest change.

These requirements present a daunting challenge and it is possible that no single organisation can meet them all. Nevertheless, it is our hope that the information provided in this report will start the process of re-imagining international forest governance.

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