

Overlapping Public and Private Governance: Can Forest Certification Fill the Gaps in the Global Forest Regime?

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Loss of terrestrial biodiversity and deforestation are serious global problems requiring concerted action. A number of measures to promote sustainable forestry and forest conservation have been discussed in the international arena, including protection of old-growth forests, endangered and vulnerable species and their habitats; restricting the use of chemicals in forestry; enhancing the well-being of local communities; sharing the benefits arising from the use of forests; and respecting indigenous peoples' rights. In spite of several initiatives to start negotiations on a global forest instrument—such as a forest convention or a protocol to an existing convention—that could establish a regulatory framework for such measures, there is as yet no legally binding multilateral instrument dedicated exclusively to forests. That said, several scholars argue that a state-based forest regime of some sort emerged in the 1990s.¹ This regime, it is argued, albeit fragmented and lacking a basis in a convention or protocol, has established principles and norms to promote sustainable forest management (SFM) and preservation of forests. The same scholars fear, though, that the principles of the forest regime are far too weak to actually ensure environmental protection in forestry, halt deforestation and reverse the dramatic global loss of biodiversity. Drawing on a metaphor of the living organism, Humphreys argues that while these principles are recognized as “life protective forces” in the global forest regime, they “can also be interpreted to admit life depleting agents that may threaten the forests.”² His concluding diagnosis is that “the principles of global capitalism, which treat human and other life forms as commodities, have colonized the regime, rendering nugatory those life protective principles the regime was intended to promote.”³ Another, perhaps less “pathological,” way of

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1. For example, Humphreys 2003 and 1999; and Tarasofsky 1999.

2. Humphreys 2003, 45.

3. Humphreys 2003, 52.

viewing this problem is that while states have managed to agree on a number of principles to promote sustainable use and conservation of forests, there remain serious gaps that need to be filled. This is my point of departure in this article.

In parallel with the evolution of the forest regime, and much as a result of states' failure to produce a binding global forest instrument and inaction on forest products ecolabeling, nonstate forest certification schemes have emerged in the shape of powerful market-driven governance and rule-making systems.⁴ A forest certification scheme usually involves the development of prescriptive principles and criteria of SFM; accreditation of independent third parties (certifying bodies); forest management auditing (verification of compliance with rules for SFM); and product ecolabeling (tracing forest products through the supply chain). Do these forest certification programs stand any chance of amending the omissions of the global forest regime? This is the question posed by the present study, which adopts a three-pronged approach. First, I examine the *logic* of certification and ecolabeling as means of environmental governance. This is followed by an identification of the *achievements and shortcomings* of the forest regime with regard to promoting sustainable use and conservation of the world's forests. In the third and main part of the analysis, I examine whether forest certification can *fill the identified gaps in the forest regime* and assess different forest certification systems as likely candidates, with a particular focus on the Forest Stewardship Council (FSC), established in 1993 as one of the world's first forest certification schemes, and its largest competitors in Europe and North America. I also examine producer participation in forest certification programs and market penetration of certified organizations to assess the support for certification among producers, professional purchasers, retailers and consumers.

Certification and Ecolabeling as Means of Governance

The subject of this article relates to studies of the emergence of nonstate authorities in global governance, the relationship between public and private rule making, and the role of transnational corporations.⁵ In political science literature, there is talk of a shift from government to *governance*, characterized by privatization, state transformation, shared public and private authority and cooperative partnerships complementing authoritative top-down regulation.⁶ In this context, the study of forest certification is interesting because it arguably represents the most advanced case of nonstate-driven rule making dynamics globally in the environmental field.⁷ A growing number of studies have analyzed the evolution of global, regional and national forest certification programs, and how we

4. Cashore 2002; Bernstein and Cashore 2000; and Humphreys 1996.

5. For example Hall and Biersteker 2002; Cutler, Haufler, and Porter 1999; Clapp 1998; Stopford and Strange 1994; and Haufler 1993.

6. See for example, Pierre 2000.

7. Cashore 2002, 505.

should understand this phenomenon.⁸ These studies all identify certification as being in opposition to intergovernmental cooperation on forests, rather than complementing it. However, reviews of the proliferation of “new” environmental policy instruments, such as eco-taxes, subsidies and other market-based instruments, voluntary agreements, and certification, ecolabeling and other market-driven tools, find that such instruments tend to *supplement* rather than supplant traditional public policy regulation.⁹ This article takes as its point of departure the assumption that forest certification acts as a supplement to the global forest regime, and asks whether it could fill the gaps evident in the state-based regime.

The causal chain believed to connect certification programs with environmental improvements is straightforward enough.¹⁰ As a first step, the development of certification standards would raise awareness, boost knowledge and elevate the sustainability discourse among all participants in the process, and would probably involve a broad range of stakeholders. When established, those standards would induce applicants to modify their practices to become eligible to participate in the scheme. If certification bodies approve management practices and performance levels, applicants would be certified and, in most systems, have an opportunity to label their products. Regular third-party audits of management practices would promote compliance with standards and continuous performance improvements in certified organizations. The label itself would differentiate products that flow from sustainably managed resources from like products that do not, thus permitting professional purchasers to signal attitudes that might distinguish them from otherwise like purchasers. Similarly, individual consumers may signal a preference for sustainable management practices by choosing labeled rather than non-labeled products. To the extent that greater market access or price premiums would flow from this process, other producers would find the option of joining more attractive, resulting in further diffusion of the preferred management practices. Thus, ecolabels rely mainly on the moral persuasion of customers and strategic market moves by producers and professional purchasers. However, a number of complications could arise and little is known about the effectiveness of certification and ecolabeling in actually achieving sustainable management of natural resources. The present paper aims to contribute to our understanding of public and private governance and the effectiveness of nonstate rule-making systems.

In a discussion of the ability of forest certification to rectify the omissions of the forest regime, some of the limitations of private governance in general and certification in particular deserve mention. First, forest certification is a voluntary market-driven instrument. Assuming that producers are rational and utility maximizing actors, it means that they would only participate if certifica-

8. Cashore, Auld, and Newsom 2003 and 2004; Meidinger, Elliott, and Oesten 2003; Cashore 2002; Elliott and Schlaepfer 2001; Lipschutz 2001; and Elliott 1999.

9. Jordan, Wurzel, and Zito 2003b; and Tatenhove, Arts, and Leroy 2000.

10. Stokke, Gulbrandsen, Hoel, and Braathen 2004.

tion generates net benefits (price premium from ecolabeling or increased market access) or allows them to avoid net costs (reduced market access). Related to this mechanism is the durability of forest certification. As Cashore has discussed, authority in “nonstate market-driven” instruments is diffuse and located among producers and consumers along the supply chain.¹¹ While public policy regulations in principle have to be obeyed, actors may suspend participation in a forest certification scheme should they feel they had reason to do so. Second, while the authority to enforce traditional public policy instruments rests with sovereign states, the authority in forest certification is given to certification bodies through their forest auditing role.¹² These bodies are authorized to suspend certificates, but they cannot enforce compliance with certification standards in any other way. Finally, while governments can establish mechanisms to encourage participation in regulatory regimes and facilitate compliance, this is normally not a task for private authorities. Without the support of governments, there are limited possibilities to ensure participation of producers who cannot afford the costs of certification or to facilitate compliance with standards.

A methodological problem when comparing certification schemes is that they act at different levels.¹³ For example, while one of the programs reviewed is based on a global set of prescriptive principles and criteria that must be adapted to the national or regional level, another acts as an umbrella scheme for nationally developed forest certification programs. A related problem concerns the potential shortcomings of extensive studies such as the present one. Because schemes operate in vastly different political, biophysical and socioeconomic settings, comparisons should ideally take these differences into account. While the analysis in this paper is mainly based on the characteristics of various schemes at the aggregate level, an examination of the actual on-the-ground impact of forest certification on forestry practices and the environment would require a comparative case-study approach at the regional level. The present paper does, however, draw on more in-depth studies of forest certification processes and effects at national and regional levels.

The Emerging Forest Regime: Achievements and Limitations

International regimes are “social institutions consisting of agreed upon principles, norms, rules, procedures and programs that govern the interactions of actors in specific issue areas.”¹⁴ Defined in this way, regimes may or may not include a core treaty.¹⁵ Notwithstanding states’ failure to agree on a binding global forest instrument, there is, as already mentioned, still talk of an emerging forest regime. To begin with, there is a cluster of non-legally binding agreements on forests, which we could call soft international law. The Forest Principles were

11. Cashore 2002.

12. Cashore 2002, 504.

13. Cashore, Auld, and Newsom 2003, 228.

14. Levy, Young, and Zürn 1995, 274.

15. Levy, Young, and Zürn 1995, 274.

agreed at the UN Conference on Environment and Development (UNCED) in 1992,¹⁶ as was “Combating Deforestation,” Chapter 11 of Agenda 21. To clarify and expand on the Forest Principles, collaboration on forests took place under the auspices of the UN Commission on Sustainable Development in the Intergovernmental Panel on Forests (IPF) from 1995 to 1997 and its successor, the Intergovernmental Forum on Forests (IFF) from 1997 to 2000. This work resulted in the IPF’s and the IFF’s Proposals for Action (1997 and 2000). They both set out a number of forest policy recommendations. The UN Forum on Forests (UNFF) was established in 2000 to continue work on international forest policy. Several regional intergovernmental processes were organized to complement the global efforts to develop forest policy recommendations. Supplementing the soft law on forest is a number of multilateral environmental agreements (MEAs) with legally binding provisions pertaining to forest conservation and management. Finally, several UN organizations and other intergovernmental institutions have increasing concerns for forests. What, then, are the achievements and shortcomings of the regime?¹⁷

An Integrated Ecosystem Approach and Protected Areas

It is agreed that the management of forest resources requires an integrated ecosystem approach and that valuable areas should be protected. Because most of the world’s remaining terrestrial biodiversity is found in forests,¹⁸ many of the provisions under the Convention on Biological Diversity (CBD) have—or are expected to have—implications for forest management and conservation policies. The CBD has established the principle of *in situ* conservation, that is, “the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.”¹⁹ A number of other MEAs also promote the ecosystem approach and the principle of protected areas.²⁰ Likewise, several soft law agreements on forests, including the Forest Principles and the IPF and IFF Proposals for Action, refer to an ecosystem approach and protected forest areas. The main shortcoming of the forest regime’s ecosystem approach is, however, that it is only a normative principle—it has no regulatory “bite.” Similarly, there are neither commitments nor guidance on the size and nature of protected areas. In 1998, the parties to the CBD adopted a work plan for forest biodiversity, aiming at integrating the conservation and sustainable use of biodiversity in national forest policies. This has so far been more of a program of research and exchange of information than a development of forest policy commitments. By failing to clarify how conservation and use of forests should

16. United Nations 1992b.

17. While the following paragraphs have benefited greatly from some of Humphrey’s (2003, 1999 and 1996) work on global forest politics, they do not by any means represent an exhaustive account of the forest regime.

18. UNEP 1995, 749.

19. United Nations 1992a, article 8(d).

20. See Humphreys 2003 and 1999; and Tarasofsky 1999.

be balanced, the forest regime in reality does little in terms of limiting commercial utilization of forest resources and reversing deforestation. Unique and valuable forest ecosystems, as well as endangered and vulnerable species and their forest habitats, still lack adequate international legal protection.

Participation, Traditional Forest Related Knowledge and Equitable Sharing

Another set of commitments and recommendations in the forest regime is related to the participation of various stakeholders, the recognition of traditional forest-related knowledge and equitable sharing of the benefits accruing from the use of forest resources. The Forest Principles urge governments to encourage the participation of economic, social and ecological interests in national forest policies and support the identity, culture and rights of indigenous people and local communities.²¹ Similarly, the principle of participation is explicitly mentioned in the IPF and IFF proposals, Agenda 21 and the CBD. Equally important to indigenous peoples and local communities is the CBD principle of equitable sharing of benefits from use of genetic resources. According to Rosendal, the discussion on traditional forest related knowledge in the IFF "largely paralleled those in the negotiations leading up to the [CBD] eight years previously in Rio."²² The end result was that most of the language of the IFF reaffirms the provisions of the CBD on this issue and explicit references are made to the CBD Articles 15, 16 and 19. However, economic forest interests prevail throughout the non-binding forest agreements and there are hardly any restrictions on investments in forest areas.²³ Thus, the forest regime arguably favors those with an interest in the commercial utilization of forests.

Criteria and Indicators of SFM

States have agreed on several sets of regional and national criteria and indicators (C&I) of SFM. The purpose of C&I sets is mainly to report on forest conditions at the national level, so that governments and policy makers can share information and use comparable parameters to describe the state of forests.²⁴ There are currently nine government-led processes in existence, including the Ministerial Conference on the Protection of Forests in Europe (MCPFE), the Montreal process of non-European temperate forested countries, the Central American Initiative, the Amazonian (Tarapoto) process in South America, the Dry-Zone Africa Initiative, and a process for the tropical region under the auspices of the International Tropical Timber Organization. About 150 countries have participated in one or more of the processes.²⁵ Through the work in the regional groups, as well as in the IPF and IFF, a consensus has emerged on C&I adapted to different for-

21. United Nations 1992b, principles 2(d) and 5(a).

22. Rosendal 2001, 453.

23. Humphreys 2003.

24. Rametsteiner and Simula 2003, 91.

25. FAO 2001, 54.

estry types and regions of the world. Although this common understanding of what constitutes SFM is important, it must be remembered that C&I sets contain no targets, timetables or performance requirements.²⁶ A C&I set is basically a tool for information sharing, not prescriptive standards for well-managed forests.

Trade in Forest Products

The International Tropical Timber Organization (ITTO) refused in the late 1980s and the early 1990s to support Nongovernmental Organization (NGO) initiatives to study the prospects for developing a forest certification and ecolabeling system.²⁷ The Forest Principles encourage the establishment of market-based instruments to promote trade in products sourced from sustainably managed forests,²⁸ but in the intergovernmental post-UNCED forest processes, trade-related issues were deferred from the IPF to the IFF and further to the UNFF, without any substantive action being recommended. While the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) prohibits international trade in certain listed species, it cannot ban trade in endangered species within countries. The World Trade Organization (WTO) has yet to take steps to promote environmental concerns in forest products trade. Although the Agreement on Technical Barriers to Trade (TBT) is binding on WTO members and covers labeling schemes, the implications of relevant provisions under the TBT remain uncertain.²⁹

Carbon Sequestration

Forests are recognized as important CO₂ reservoirs—or sinks. Despite scientific uncertainty on the role of forests as long-term carbon sinks, forests' ability to capture and sequester CO₂ is acknowledged under the UN Framework Convention on Climate Change (UNFCCC 1992) and the Kyoto Protocol (1997). Annex 1 parties to the Kyoto Protocol may use *afforestation* (planting of new forests) and *reforestation* (planting of forests on lands that historically contained forests) since 1990, measured as verifiable changes in carbon stocks, to meet their emission targets.³⁰ Conversely, deforestation in Annex 1 countries since 1990 may impact negatively on their balance of carbon stocks. The Kyoto Protocol's Clean Development Mechanism (CDM) allows emission credits for afforestation and reforestation projects, but not for projects related to forest protection and sustainable management of existing forests. Since 1998 climate change negotiating teams have argued long and hard over the subject of sinks in the CDM. In December 2003, at the ninth Conference of the Parties (aptly labeled

26. Rametsteiner and Simula 2003, 91.

27. Humphreys 1996, 74–75.

28. United Nations 1992b, principle 13(c).

29. See Bernstein and Cashore 2004; and Klabbers 1999.

30. United Nations 1997, article 3(3).

the “forest COP”), prospective buyers and sellers of carbon sequestration credits agreed on a compromise package,³¹ but the value of the compromise still remains untested.³² Sequestering may in fact create stronger incentives for forest protection than any of the soft law forest policy recommendations, though, on the other hand, it could also stimulate uniform “carbon plantations.” Planting fast-growing monocultures of softwood would be the most cost-efficient way to lock up CO₂ and hence claim emission credits, but this is certainly not a measure that could ensure species diversity. Carbon sequestration may even result in actions to *replace* natural grown forests with plantations, something that almost certainly will result in loss of forest biodiversity. Similarly, substitution of biomass energy for fossil fuels—an implicit incentive of the Kyoto Protocol—could result in more intensive forestry at the expense of biodiversity conservation.³³

Implementation, Reporting and Review

National Forest Programs (NFP) are recognized as a means to implement internationally agreed principles of sustainable forestry. Since UNCED in 1992, the Food and Agriculture Organization (FAO) of the UN has assumed a leading role in promoting NFPs and there is now a consensus that such programs should integrate forests in holistic land use plans.³⁴ States shall report on the performance of forest policy commitments and the UN Economic and Social Council has tasked the UNFF with monitoring progress in implementation. The problem is, however, that while the commitments and recommendations of the forest regime are important, most of them are not legally binding and—being for the most part a collection of normative principles without rules, targets or time-tables—it is difficult to ascertain degree of implementation. And because the regime is fragmented and based on a number of different agreements rather than a single convention or protocol, the UNFF can, for the most part, only monitor progress in the implementation of the recommendations that have been agreed under the cluster of non-binding forest agreements. Nor are there enforcement or facilitative mechanisms in the regime to promote implementation of inter-governmental forest policy proposals. Although the IFF discussed the prospects for creating an international forest fund, states could not agree on mechanisms to enable financial transfers to developing countries.

Can Forest Certification Fill the Gaps in the Forest Regime?

Due to the aforementioned limitations of private governance, forest certification stands little chance of fully supplanting the forest regime, but some of the regime’s omissions could possibly be addressed by forest certification. First, there

31. See UNFCCC 2003 for details.

32. *Earth Negotiation Bulletin* 2003, 17.

33. See Huston and Marland 2003.

34. Humphreys 1999, 252.

is the failure to ensure the interests of various stakeholders. We saw that the interests of forest owners tend to prevail throughout the forest regime. Second, there is the lack of strong environmental and social commitments in the regime. States have failed to agree on substantial measures to protect forests, promote a holistic ecosystem approach to forestry and ensure the interests of indigenous peoples and local communities. A third weakness is the lack of effective control and compliance mechanisms. Although measures have been adopted to promote reporting and reviews of the implementation of international forest policy recommendations, no instruments to enforce (or facilitate) compliance exist. Finally, there are no multilaterally agreed rules for trade in products sourced from sustainably managed forests. How, then, could forest certification compensate for these weaknesses? In what follows I explore five dimensions of forest certification, the first three of which relate to the characteristics of various schemes, the remainder to the supply and demand side of acceptance of forest certification in general and various schemes in particular.

1. *Inclusiveness in standard development*: through the inclusion of a broad range of stakeholders in standard development and the governing bodies of schemes, certification could achieve a balance in the powers of ecological, economic and social groups to influence forest use and management.
2. *Strength of environmental and social standards*: through the adoption of prescriptive environmental and social performance standards, certification could, *inter alia*, promote protection of old-growth forests, rare and threatened species and their habitats; restrict clearcuts and the use of chemicals in forestry; secure workers' and indigenous peoples' rights; enhance the well-being of local communities; and promote sharing of benefits arising from the use of forests.
3. *Quality of auditing*: with regular, high-quality on-the-ground forest auditing, certification programs could promote compliance with SFM standards and continuous environmental and social performance improvements in forest management.
4. *Supply side participation*: with substantial producer participation in schemes, forest certification could impact on forestry practices across a wide front.
5. *Demand side penetration*: by penetrating markets, certified organizations could promote trade in products sourced from well-managed forests.

Inclusiveness in Standard Development

Although all the forest certification schemes under review here are formally private and voluntary not-for-profit organizations, they are in reality controlled or "owned" by different interests. Following discussions commencing in 1990, the FSC was founded in 1993 in Canada and legally registered in 1995 in Mexico. With the World Wide Fund for Nature (WWF) assuming a leading role, the FSC

was set up by environmental organizations, social and indigenous peoples' groups, timber traders, forest owners, community forest groups and other stakeholders. The FSC aims to promote environmentally appropriate, socially beneficial and economically viable management of forests. To achieve this goal, the FSC provides global performance standards for well-managed forests in the form of prescriptive principles and criteria, including tenure and use rights, indigenous peoples' rights, community relations and workers' rights, environmental impact, management plan, monitoring and assessment, maintenance of high conservation value forests, and plantations. The global principles and criteria must be elaborated to provide more detailed national or regional performance standards through a process where ecological, economic and social groups participate on a level playing field and enjoy the same decision-making rights. If they are found to be in conformity with the scheme's principles, criteria and other regulations, the FSC's international board will approve the nationally adopted standards. Because FSC's aim was to create more ambitious ecological and social requirements than states have been able to agree on, the performance standards are not linked to any state-based international criteria. Public sector bodies are not allowed to participate in the elaboration of standards nor in the scheme's governing bodies.

Several countries' national forestry interest groups responded to the FSC by setting up competing schemes. With the launch of the International Organization for Standardization's (ISO) environmental management system (EMS) standard ISO 14001 in 1996, forest organizations could opt for a credible and widely recognized alternative to the FSC for third party certification of forest management and operations. ISO is a worldwide federation of national standardization bodies founded in 1947 to promote international standards and facilitate trade. With a mix of private and public involvement in standard development, the ISO 14000 standards may be characterized as a hybrid private-public regime dominated by private industry.³⁵ ISO has been criticized for lack of transparency and inadequate involvement of both environmental organizations and developing countries in the drafting of its environmental management standards.³⁶ The generic nature of ISO 14001 means that there is no linkage to internationally agreed C&I for SFM.

In response to demands for internationally recognized certification systems and ecolabels attesting *specifically* to sustainable forestry practices, the Pan-European Forest Certification (PEFC) scheme was set up at the initiative of national forestry interest groups of several European countries in 1998–99. PEFC is based on the criteria, indicators and operational guidelines of the pan-European forest process (MCPFE) and governments were actively involved in the establishment of the scheme. This scheme operates somewhat differently than the FSC, in that it is an umbrella certification scheme that facilitates the

35. Clapp 1998.

36. Clapp 1998; see also Raines 2003.

mutual recognition of national certification schemes and provides an “internationally credible framework” and a common ecolabel for such schemes. Thus, the PEFC Council may approve nationally developed schemes if they conform to the criteria, indicators and operational guidelines of the scheme. Although PEFC thus far has only endorsed European certification schemes it has established governing bodies in several non-European countries, and it was renamed the Programme for the Endorsement of Forest Certification schemes in 2003 to signal its global scope and aspirations.

In North America, two certification programs were developed more or less expressly as alternatives to the FSC scheme.³⁷ The American Forest and Paper Association (AF&PA)—a national trade association for the forest, paper and wood products industry in the United States—initiated the 1994 Sustainable Forestry Initiative (SFI) program, developed by professional foresters, conservationists and scientists chosen by the AF&PA.³⁸ While the SFI specifies national principles, objectives and performance measures, forest companies are given considerable leeway to elaborate and interpret at site, state and regional levels. In Canada, a group made up of the Canadian Pulp and Paper Association (CPPA) and a number of industry associations, approached in 1994 the Canadian Standards Association (CSA) to develop a forest certification scheme.³⁹ The CSA adopted the program in 1996 as the national standard for forest certification and the first forest company was certified to the standard in 1999. Sustainable forest management criteria and elements developed by the Canadian Council of Forest Ministers set minimum performance levels. These criteria need to be elaborated and adapted to local conditions through an open and transparent multi-stakeholder process. Not unlike the PEFC, the North American schemes are based on internationally agreed C&I, more precisely the pan-European and/or the Montreal Process criteria. The European and North American competitors to the FSC program share yet another feature: while ecological, economic and social interests have an equal say in the FSC, all the competitors are set up by the forest industry for the forest industry. Although the participation and powers of ecological and social interest varies somewhat among the latter schemes—with the CSA program in Canada and some of the PEFC endorsed European schemes allowing greater participation of various stakeholders than the US-based SFI program—all are industry dominated.

In sum, the FSC program is clearly the most inclusive of the certification schemes with regard to the participation and decision-making power of *a broad range of civil society stakeholders*. Concerning *public involvement and linkage*, on the other hand, it is the least inclusive of the standards reviewed because it is not linked to any internationally agreed C&I and FSC regulations explicitly prohibit the participation of state actors in the organization itself as in standard develop-

37. Cashore, Auld, and Newsom 2003.

38. Wood 2000.

39. Elliott 1999.

ment. While this could be taken as evidence of forest certification as an arena of governance away from public authority, the widespread proliferation of competing schemes with participation of public bodies and linkage to regional intergovernmental processes suggests that nonstate governance acts as a supplement rather than alternative to state authority. Moreover, as Boström concludes in a study of the FSC process in Sweden, the political and administrative culture along with a recently revised forest policy encouraged the private sector to come up with fresh initiatives and the public sector to support and legitimize forest certification.⁴⁰ Hence, even in the case of FSC certification the state may not be absent after all.

Strength of Environmental and Social Standards

The management measures required to comply with certification standards are dependent upon a number of factors, including public policy regulations, the pre-certification levels of environmental and social concerns in forest management, and the substantive strength of the certification standards. Only the latter variable will be considered here. As a point of departure, we assume that the stronger the standards of a particular scheme, the greater its chances to influence forestry practices.

A salient difference between various certification schemes is whether they are management system based (focusing on process) or performance based (focusing on outcome). ISO 14000 are EMS standards, meaning that they do not prescribe the required output of an operation but the desired quality of the process to be applied. Because ISO 14001 is a management system-based standard intended for use in any industry, sector or service, there are no specific performance objectives outlined in the standard. Essentially, this means that forest owners certified to this standard can set their own performance objectives and targets. ISO 14001 certification has been criticized for providing little incentive for firms to go beyond the minimum requirement of meeting domestic laws and regulations.⁴¹ Clapp argues that WTO's recognition of the ISO 14000 series as legitimate public standards and guidelines in effect might make these "a ceiling for international EMS standards rather than a floor."⁴² This is because public EMS standards that are more intrusive and demanding than ISO could be challenged as unfair barriers to trade under the WTO.

Many forest companies are certified only to ISO 14001, meaning that the certification exclusively is management system based. However, ISO certification of an organization's management system is increasingly used in combination with regional and national SFM standards, leaving individual forest organizations with little or no possibility to determine their own performance

40. Boström 2003.

41. See for example, Clapp 2001 and 1998; Lipschutz 2001; and Krut and Gleckman 1998.

42. Clapp 2001, 30.

objectives. In being based on a system standard such as ISO or the EU's Eco-Management and Audit Scheme (EMAS) as well as SFM standards, PEFC, and SFI and CSA combine the system and performance-based approach. Although this, presumably, should guarantee management and performance improvements, the industry-dominated schemes are generally regarded as less intrusive and rigorous than the FSC.⁴³ With regard to, *inter alia*, protection of old-growth forest, restricting clearcuts, maintaining forest biodiversity, restricting the use of chemicals, banning the use of genetically modified organisms (GMOs), securing workers' rights, enhancing the well-being of local communities, sharing the benefits arising from the use of forest resources and respecting indigenous peoples' rights, the FSC scheme appears more demanding than the industry-dominated programs in many regions. Subak argues that FSC principles and criteria also would promote not only environmental and social concerns in forestry but some of the goals of the Kyoto Protocol better than any other certification scheme.⁴⁴ CDM sinks projects with FSC certification as a screen could consequently promote carbon sequestration while maintaining forest biodiversity.

In general, while FSC certification rests on prescriptive performance criteria, the industry-based schemes place greater weight on standards of procedure, organizational and management measures and flexibility in applying sustainable forestry standards.⁴⁵ The latter group of schemes has repeatedly been criticized by environmental organizations for failing to promote workers' rights, the interests of indigenous peoples and local communities and protection of forest biodiversity.⁴⁶ However, there are clearly differences between these programs as well as *within* various schemes. Wood compared eight certification standards from different regions and certification systems.⁴⁷ He found that "although there are many commonalities between these standards, there are also discrepancies and inconsistencies between regions that may amount to an uneven playing field in the realm of international trade."⁴⁸ For example, while many certification systems stress an ecosystem-based approach to harvesting, the US-based SFI program emphasizes improving forest productivity and maximizing yield.⁴⁹ The PEFC Council has endorsed 13 national forest certification schemes in Europe, which vary considerably in environmental and social rigor. Some discrepancies are of course due to national and regional variations introduced to meet particular biophysical and socioeconomic configurations, but there are also inconsistencies that only can be explained as elasticities in the ecological and social ambition of the adopted standards. The Swedish PEFC standards are the most strict and wide-ranging of any PEFC endorsed national initiative.⁵⁰ There has been

43. Rametsteiner and Simula 2003; and Cashore, Auld, and Newsom 2003.

44. Subak 2002.

45. Cashore, Auld, and Newsom 2003.

46. See, for example, Ozinga 2001; and Vallejo and Hauselmann 2001.

47. Wood 2000.

48. Wood 2000, 1.

49. Rametsteiner and Simula 2003; and Wood 2000.

50. Cashore, Auld, and Newsom 2004.

some concern among forest interest organizations in all of the forest-rich Nordic countries (Finland, Norway and Sweden) that laxer environmental and social standards and practices in other PEFC-endorsed national initiatives may impact negatively on the credibility of stricter schemes. Similarly, much as a result of the multi-layered governance approach for standards development, there is also significant variation in the strength of regionally developed FSC standards.⁵¹ For example, the Swedish FSC standards seem to take a more simplified approach than other regionally developed standards, but having said that, they are still more stringent and less discretionary than the Swedish PEFC standards.⁵² In North America, the FSC standards in the Canadian Maritimes appear much more rigorous and wide-ranging than those that emerged from the FSC US Northeast standard-setting process.⁵³

Notwithstanding variations in the strength of standards, it must be remembered that rule making in the programs is a dynamic and iterative process, and any detailed comparison of standards may rapidly become outdated. Different certification programs have converged and cross-fertilized quite intensively. While many industry-dominated schemes have responded to FSC competition and criticism from environmental groups by changing upward, FSC regulations have become more flexible to accommodate the needs of business.⁵⁴ Nonetheless, some basic differences between the schemes are likely to persist. The overall conclusion remains that the FSC in a number of regions appears to have more stringent environmental and social standards than competing schemes.

Quality of Auditing

Independent certification bodies accredited by forest certification schemes audit forest operations on the ground. If the certification body approves forest operations, the forest owner obtains a certificate along with a right to market his wood as certified. Forest certification schemes could therefore be said to “franchise” their name to national and regional organizations around the world.⁵⁵ What, then, is the impact of forest management auditing?

One might expect that the power residing in regular, on-the-ground forest management audits and certifying bodies to suspend the certificate of non-compliant forest holdings would encourage compliance with standards. Corrective Action Requests, that is areas most in need of attention, and other issues addressed by independent certification bodies shed light on the impact of forest audits. A study by Rametsteiner suggests that improvements in forestry practices

51. Rametsteiner and Simula 2003; Counsell and Loraas 2002; and Wood 2000.

52. Gulbrandsen forthcoming.

53. Cashore and Lawson 2003.

54. Cashore, Auld, and Newsom 2004.

55. OECD 2003, 12.

in Europe following FSC certification and audits would be likely to occur.⁵⁶ He found that FSC certification in European countries has widened tree diversity and the proliferation of mixed stands, improved the protection of rare and threatened species and their habitats, and reduced the use of chemicals in forestry. The areas addressed by the Corrective Action Requests concerned the state and accuracy of written documentation in forest management and ecological and social measures in forestry.

On the other hand, Counsell and Loraas of the Rainforest Foundation, a non-profit organization campaigning to protect the world's rainforests, in a voluminous report based on several case studies, alleged that FSC certification suffered from inadequate audits by FSC accredited certification bodies, deficiencies in the operation of the scheme, and lack of effective control mechanisms.⁵⁷ The FSC, backed by the WWF, responded that although there are some weaknesses in certified forests, many of the allegations were out-of-date or inaccurate.⁵⁸ Nonetheless, as a result of the report, the Rainforest Foundation no longer recommends FSC certified tropical timber.

There is little to gain from conducting regular audits if the certification standards are weak or lax, leaving it up to the forest manager to interpret and apply the rules. Environmental organizations allege that third-party assessments under the industry-dominated schemes suffer from lax standards, interpretative leniency and deficient auditing procedures.⁵⁹ In a similar vein, several environmental and social criteria may be difficult to assess in forest management audits, which would increase the likelihood of different interpretations by individual auditors. Variations are found, in practice, not only in the scrutiny of audits by different certification schemes, but also different certifiers' audits within the same scheme.⁶⁰ Independent certification bodies tend to interpret and verify the same certification criteria very differently in their assessments and because these bodies compete for clients in the market and, according to critics, share therefore a vested corporate interest with forest holdings in ensuring successful audit outcomes, it is claimed that they in reality are not as independent as they ideally should be.⁶¹ Countering these suggestions, Rametsteiner and Simula say, however, that "it can safely be said that forest certification has brought along improvements in internal auditing and monitoring in forest organizations."⁶² They found that independent audits are likely to increase the quality of forest management, thereby improving the conservation of the forest ecosystem. In conclusion, then, we can expect forest management assessments

56. Rametsteiner 1999.

57. Counsell and Loraas 2002.

58. FSC 2003a.

59. Ozinga 2001; and Vallejo and Hauselmann 2001.

60. See for example, Wood 2000.

61. Counsell and Loraas 2002.

62. Rametsteiner and Simula 2003, 95.

to promote progress towards sustainable forestry practices, but the impact of such assessments is inextricably linked not only to the quality of audits *per se*, but the *stringency* and *rigor* of a scheme's standards. Although the FSC is no exception to the wide variation separating auditors of the same scheme, one would expect the impact of audits of this scheme to be greater than audits by competing programs with weaker and more flexible standards.

Supply Side Participation

Participation by target groups is vital for a voluntary, market-driven, rule-making project to succeed. The wider the participation in a certification scheme, the greater the likelihood of influencing forestry practices. According to the FAO, the area of certified forests at the end of 2000 comprised only somewhere between 2 and 3 percent of the world's forests.⁶³ The certified forestland in the world is extremely unevenly distributed between developed and developing countries. The FSC exists in several developing countries, including Brazil, Indonesia, Malaysia and Thailand, and national certification schemes have been created in forest-rich developing countries, such as the Indonesian Ecolabeling Institute (LEI—Lembaga Ekolabel Indonésia) program and the Malaysian Timber Certification Council (MTCC) scheme. Nonetheless, the fact remains that the share of certified forestland in developing countries in the world's total certified area is only about 10 percent.⁶⁴ Explanations have indicated the costs of certification and lack of knowledge of certification programs and control of forestland in developing countries.⁶⁵

Almost half of the total area certified by FSC in developing countries is made up of plantations,⁶⁶ typically uniform monocultures of fast-growing softwood with little genetic variability. This is a paradox given that when the certification issue first surfaced in the ITTO in the 1980s, the idea was to certify tropical, mega-diversity forests and not temperate and boreal forests—and certainly not plantations. Timber sourced from plantations is marked with the same ecolabel as natural grown forests; customers have no means to distinguish timber products from natural grown forests. Although plantations may take the pressure off commercial utilization of natural grown forests, the problem is that natural forests are often replaced with plantations to facilitate faster growth. In sum, with so little certified natural grown forests in the tropics, we should not expect forest certification to halt the rate of deforestation, forest degradation and loss of biodiversity in the tropics. Moreover, as Dauvergne found in a study of corporate forestry practices in the Asia-Pacific, the informal and political nature of state–business relations in the region represents a considerable barrier to

63. FAO 2001, 57.

64. Rametsteiner and Simula 2003, 92.

65. OECD 2003.

66. Based on figures in FSC 2003b.

change in logging practices on the ground.⁶⁷ Thus, he concludes, although the transformation to the formal principles and rules of forest management has increased the pressure on loggers to modify practices, it is not likely to save the remaining old-growth commercial forests.⁶⁸ Notwithstanding substantial differences between Southeast Asia, Latin America, and Africa in the causes leading to deforestation, scholars seem to agree that wide-ranging policy interventions and socioeconomic reforms in all regions are necessary to protect the tropical forests.⁶⁹

An examination of participation in competing schemes shows clearly that the FSC has not become the one and only global standard-setting body for market-driven certification that environmental organizations had hoped for. Measured in terms of certified forestland, PEFC had become the world's largest forest certification scheme by mid-2002, followed by the SFI program—growing at the fastest rate—with the FSC coming third and the CSA fourth.⁷⁰ To the disappointment of many environmentalists, the widespread support of forest owners for industry-dominated programs has marginalized the FSC in several regions of the world. Cashore and colleagues examined forest certification in eight regions in North America and Europe and found that in all cases business-dominated competitors to the FSC had emerged and become larger than this program.⁷¹ An exception can be found in Sweden, where a competing industry-dominated scheme (PEFC) was floated, but failed to overtake the FSC.⁷² The Swedish FSC enjoys, in fact, five times the endorsement of the Swedish PEFC, and accounts for almost 30 percent of the total area certified by the FSC worldwide.⁷³ Explanations have pointed, *inter alia*, to ownership structure in the Swedish forestry sector (a few vertically integrated forest companies control a significant share of the forestland) and dependence on environmentally concerned markets (Germany, the UK, the Netherlands and Denmark).⁷⁴

How can we, very briefly, explain why many forest owners preferred to develop and sign up to competing schemes to the FSC? First, perceptions that environmental and social interests dominate the decision-making process of the FSC caused forest owners to question its credibility and independence. In the absence of state legitimization, there is an “accountability deficit” in governance dominated by NGOs, because these organizations “are not accountable for their actions in the sense required by even a minimalist theory of democratic governance.”⁷⁵ The FSC has taken this challenge seriously by strongly promoting

67. Dauvergne 2004.

68. See also Dauvergne 2001.

69. See for example, Lambin and Geist 2003.

70. Raunetsalo, Juslin, Hansen, and Forsyth 2002.

71. Cashore, Auld, and Newsom 2003.

72. See Boström 2003; Elliott and Schlaepfer 2001; and Elliott 1999.

73. Gulbrandsen forthcoming.

74. Gulbrandsen forthcoming.

75. Rosenau 2000, 192.

the norms of accountability and transparency and by balancing the decision-making powers of economic, social and ecological interests. Nonetheless, a recurring theme among critics of the FSC is usurpation, in that environmental organizations are portrayed as self-appointed judges in a field where they have inadequate understanding, limited experience and no legitimate right to regulate in the first place. This moved forest owners to set up *industry-based* schemes. Second, forest owners' perceptions of the high costs of FSC certification provided them with an incentive to develop more *affordable* schemes. There are transaction costs related to pre-assessment studies (to determine whether certification is feasible) and the certification process itself, as well as costs involved in making management procedures eligible for membership. In particular, the potentially high costs involved in complying with demanding certification requirements and the lack of a group certification option (where a single certificate covers several forest owners at the same time), that could reduce transaction costs for small-scale family holdings propelled forest owners to look for alternatives.⁷⁶ Third, forest owners' perceptions that the FSC lacked flexibility in its interpretation and application of rules and its favoring of economies of scale gave incentives to develop more *flexible* schemes. Finally, and closely related to all of the above, the stringency of the FSC motivated forest industries and forest owners to set up schemes that pay less attention to environmental and social criteria for sustainable forestry, and more to *economic* criteria. The formation of industry-dominated schemes may be seen as an attempt to coopt the discourse on forest certification and attract forest owners away from the stronger standards of the FSC.⁷⁷ In sum, the forest owners in many countries considered the FSC to be costly, rigorous, intrusive and lacking in legitimacy.⁷⁸ The result is that a number of different certification schemes now compete for market credibility and support.

Demand Side Penetration

The greater the market support for a certification scheme, the greater its chances of influencing forestry practices in the direction envisaged by the scheme. From the industry's point of view, the main purpose of certification is to ensure or improve market penetration for certified organizations and ecolabeled products. Market penetration will generally depend upon the willingness to pay a premium for ecolabeled products in the marketplace and the standing of the ecolabel relative to other labels. Widespread proliferation of third-party certificates in the forest sector is also likely to highlight the environmental attributes of forest products, which in turn may result in a preference for forest products over non-wood-based substitutes of competitors.

76. The FSC in 1998 adopted a group certification option.

77. Gulbrandsen 2003, 106.

78. See also Cashore, Auld, and Newsom 2004.

Certification incentives would also probably expand if professional purchasers and buyer groups demanded certified suppliers or ecolabeled products. WWF has formed a powerful alliance with customers, producers and forest owners through the Global Forest and Trade Network to promote FSC certified timber and wood products. With 18 local Forest and Trade Networks, buyer groups and activities in nearly 30 countries, WWF is well suited to promote the FSC scheme. In a number of countries, including Sweden, the United Kingdom, Germany, the United States and Canada, influential customers have participated in working groups to develop national or regional FSC standards. There is little doubt that NGO support has boosted FSC's credibility and that the powerful alliance of WWF and major purchasers has contributed to its wider proliferation.

Despite their success in promoting the FSC in some markets, the environmentalists have not been able to prevent the market penetration of competing schemes. Much as a result of a limited supply of FSC-labeled forest products, most "environmentally concerned" professional purchasers only require certified suppliers, not a particular label. Once again, this is evidence that the effectiveness of a specific scheme is dependent upon widespread participation in a scheme. Without adequate supplies, it is almost impossible for large buyers to enforce a specific ecolabel policy. This is exactly what several purchasers in the UK (WWF 95+ group) found out when they tried to enforce a self-imposed policy requiring a specific share of FSC-labeled products from their suppliers. Due to limited supplies, it was impossible to comply with the policy, which had to be softened or abandoned altogether.

Although there is a market for certified timber products in Europe, and, increasingly, in North America, the overwhelming share of timber traded worldwide is not certified. Explanations, as shown above, have generally pointed to limited supply of certified products rather than a lack of demand. Niche markets for some ecolabeled products have emerged and preference studies indicate a measure of willingness among customers to pay a *small* premium for such products.⁷⁹ However, certification processes have clearly not been driven by ordinary customer demand. Forest certification is rather a result of professional purchasers' requirements regarding paper and other forest products, in response to the activism and pressures exerted by environmental organizations, and may be seen as a precautionary strategy to avoid conflicts with NGOs, bad publicity and consumer boycotts.

Certified forest products are not only accepted in the market, but also a requisite of many corporate buyers in Europe and North America. This means that market support is likely to continue to stimulate the proliferation of forest certification in the developed world. On the other hand, multitudes of different ecolabel schemes in general seem to confuse customers and weaken the credibility of such policy instruments.⁸⁰ The global rivalry between certification

79. Veisten 2002; Pajari, Beck, and Rametsteiner 1999; and Rametsteiner et al. 1998.

80. Jordan, Wursel, and Zito 2003b.

schemes, and, not least, the supporters of each scheme, may discredit all and risk the reputation of forest certification. Moreover, forest holdings in tropical countries have little trouble selling uncertified and even illegally-sourced timber on the world market. Added to these obstacles standing in the way of acceptance of certification programs in tropical forestry is the fact that only a small share of the industrial roundwood legally harvested in tropical forests enters international trade.⁸¹ We should therefore not expect market support for certified forest products in Europe and North America to impact significantly on the participation of tropical forest holdings in certification schemes.

Conclusions

Through its incorporation of a broad range of stakeholders in standards development, the promotion of stringent and wide-ranging standards and trade in products from well-managed forests, the FSC initially showed it had the greatest potential of the certification schemes to fill the gaps in the forest regime. This statement needs some qualification, however, first because rule-making in the schemes is an iterative process and rules subject to frequent amendment, second because there is wide variation in the regional and local implementation of the FSC and its industry-dominated competitors. Third-party audits are essential in all schemes, but schemes vary widely in their scrutiny of such assessments as do auditors of the same scheme. Although this obviously applies to the FSC too, one would expect the impact of audits in this system to be greater than that of several competitors whose standards are weaker and allow far wider flexibility in their interpretation and application. In sum, FSC certification had from its inception the potential to address the forest regime's failures to ensure the interests of various stakeholders; promote strong environmental and social regulations in forestry; and establish effective control and compliance mechanisms.

The examination of supply side participation and demand side penetration paints a quite different picture. The emergence of industry-dominated forest certification schemes and the popular support of forest owners for such schemes have marginalized the FSC in many countries, reducing its chances to set a global standard for well-managed forests. Although the FSC is one of the first forest certification schemes in the world, it is currently the industry-dominated schemes—thanks to their endorsement by forest owners—that are most likely to influence forest management around the world. Of course, if forest owners are to endorse a voluntary certification program, they need to be convinced of its legitimacy. Without legitimacy in producer groups, it would be impossible to attain enthusiastic approbation for a certification scheme. Legitimacy, in turn, seems based on the ownership, strength and costs of a scheme. The lack of ownership felt by many forest owners to the FSC and the cost of

81. Rametsteiner and Simula 2003, 96.

complying with its stringent standards go a long way to explain the on-going proliferation of industry-dominated programs. Environmental organizations' support of the FSC and some buyers' demand for FSC-labeled timber and forest products have failed to halt this development. As a consequence, the scheme one arguably would have expected to have the greatest chance of remedying some of the failures of the forest regime seems hamstrung in actual practice. This study has thus—in some measure—confirmed the often-heard claim of an inherent conflict between two necessary conditions for effectiveness in voluntary, market-driven instruments: the need for strong environmental standards and the need for widespread participation of producers. Unless markets are prepared to pay a significant premium for strong ecolabels, producers will, not surprisingly, tend to prefer labels under schemes with weaker and more flexible standards. On the other hand, in the case of forest certification, many of the latter schemes have changed upward following competition from the FSC and pressures from environmental organizations.

Although there is certified forestland in several developing countries, certification is primarily a tool applied in the developed world. The market benefits accruing from certification are evidently not sufficient to convince large numbers of forest holdings in developing countries to undertake the necessary steps to become certified. In addition to the costs of certification, there is little knowledge of certification programs and control of forestland, and a large share of the forestland that *is* certified in the tropics is made up of plantations. We should thus not have unrealistic expectations that forest certification will have a significant impact on sustainable use and conservation of natural grown tropical forests. The policy implication of this finding would be that to save the remaining old-growth commercial forests in the tropics, stronger measures than market-driven tools seem necessary.

In conclusion, it remains to be seen whether forest certification can fill the gaps of the forest regime or if it amounts to little more than a successful marketing tool. While forest certification standards are diverse and audits are of varying quality, the evolution of quite substantial and wide-ranging nonstate certification systems shows that market players in many cases are prepared to go beyond legal requirements. Given supply and demand-side support in Europe and North America, forest certification would probably be more likely to promote sustainable forestry in the temperate and boreal zones than in the tropical zone. The effect would be to widen the gap separating the environmental management and enforcement capacities of the developed and developing world, rather than bringing them closer together.

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