Missing the Forest for the Profits: The Role of Multinational Corporations in the International Forest Regime

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The international community has placed great hope and invested considerable time in exploring a global forest convention through the United Nations Conference on Environment and Development's Intergovernmental Forum on Forests and the Intergovernmental Panel on Forests process under the Commission on Sustainable Development. Multinational corporations control almost 40% of the world market in forest products, constituting a major stakeholder in global forest policy. The few cases of direct intervention by multinational corporations at international fora suggest their interests are expressed elsewhere. The authors identify and discuss three types of intervention in the existing forest regime: avoidance, enforcement-driven compliance, and performance-driven compliance. The regime has not achieved performance-driven compliance from multinational corporations because the regime itself is weak and has little support from states internationally and domestically. The authors suggest that multinational corporations have been so effective at avoiding or conditioning compliance that incentives for complying fully with the regime are nil.

Historically, forest policy has been largely of national origin and interest. The forces of globalization today—market drive for competitive advantage and intergovernmental agreements to secure global benefits[1] from forests—have resulted in a call for global forest policy initiatives, the collection of which may be considered the international forest regime (Mayers & Bass, 1999). An international regime is a set of principles, rules, norms, and procedures that actors create and accept in a particular issue area of international relations. An incipient and contradictory forest regime, the outlines of which we present here, governs the international issue area of forest-related activities. Why can the international forest regime be characterized as incipient when, as early as 1882, American foresters were discussing the consequences of overexploitation for the country and the world?[2] One of the main obsta-

1. These benefits include biodiversity conservation and carbon sequestration, as well as smaller scale economic, ecological, and social benefits.

2. The First American Forest Congress was held in 1882 in response to national and international forestry concerns.

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cles to effective international policy development is the conflict of interests of different stakeholders (Oye, 1996), and the forest regime is no exception. Sovereign states, local communities and companies, environmental and industry nongovernmental organizations (NGOs), and multinational corporations (MNCs) all have a stake in both national and global forests and forest resources, and, to varying degrees, all play a role in the development and implementation of forest policy.

MNCs are companies engaged in producing and selling goods or services in more than one country. They ordinarily consist of a parent company located in the home country and at least five or six foreign subsidiaries, typically with a high degree of strategic interaction among the units (Shapiro, 1994). MNCs become important players in global forest management and exploitation through their global forest product trade and forestry practices. Our objective in this article is to shed some light on the problem of international forest policy development by focusing on MNCs as a key player. We consider here major forest-related companies whose involvement in global discussions has been documented independently or by their own account. Because we do not consider the numerous national policy channels that MNCs pursue, domestic lobbying or other such operations are not discussed. Likewise, the influence of citizen groups, NGOs, and public officials on international forest policy, although significant, is covered elsewhere (Mohd & Laarman, 1994).

As background, we review the scope of MNCs in global forest tenure and the history of two broad initiatives in the international forest regime. The main argument of this article articulates a model of MNC intervention in international policy development and presents examples in the context of the forest regime.

Background I: How Corporate Are Forests?

Of forests worldwide, 140 million hectares are exploited under concession, limited-time exploitation permits on public land, by fewer than 50 forest product corporations (Mayers & Bass, 1999). If we accept Food and Agriculture Organization of the United Nations (FAO) estimates of global forest cover in 1995, this is approximately 4% of the total (FAO, 1999a). This is a minimum figure because although concessions on public lands provide a significant part of the total forest exploited by MNCs, other systems of forest control, such as private ownership and community-owned forestry projects, supply the corporate sector as well. The common problem with the concession system for timber exploitation is that when the forests are exploited under short-term contracts for maximum profit, there is little incentive for the multibillion-dollar interna-

tional timber industry,[3] which does not own the resource, to plan for and manage for long-term exploitation.[4] As a result, serious environmental, social, and economic damages often occur in areas of concession forests (Freese, 1998).

Many forestry operations themselves are unsustainable. For example, the environmental impact of clear-cutting in patches larger than 10 hectares, although having attractively low short-term costs, results in increased fire hazard (Nepstad et al., 1999), loss of topsoil, soil compaction, salinization and / or acidification, and reduced capacity for regeneration (Uhl & Vieira, 1989; Wyatt-Smith & Foenander, 1962). Thus, an international forest regime should address both environmental and local socioeconomic problems of forest exploitation and work to ensure the long-term economic sustainability of international forest product trade.

The costs of environmental damage abatement to firms using at least 4% of the world's forests can be significant. Applying some form of management to reduce environmental problems and ensure future harvest in temperate and boreal forests could increase costs by 10% to 20% (International Institute for Environment and Development [IIED], 1996). Reaping a one-time harvest in tropical forests in limited-time land concessions yields 20% to 450% more profit than managing for future harvests (Bowles, Rice, Mittermeier, & Fonseca, 1998). These proportions of their revenue are how much forest-related MNCs stand to gain or lose from international regulations, given their current management practices.

Background II: An Overview of International Forest Negotiations

Forest destruction and exploitation were not in the international agenda until the late 1970s, when rising international pressure from the environmental movement and industry concerns for maintaining access to forests moved global organizations to respond to the problem. The first such responses were the signing of the International Tropical Tim-

3. The revenue of the largest forest and paper companies in global markets in 1999 was approximately U.S. $148 billion, third in profits only after the mineral and oil extraction and oil refining industries (Fortune, 2000).

4. Additional problems with the concession system include the following as described by Panayotou and Ashton (1992): (a) concession given for a time period shorter than the felling cycle, (b) concessions awarded on a political rather than economic basis, (c) tax structure based on marketed timber removed rather than on standing potentially marketable timber, and (d) disregard to customary use rights.

ber Agreement (ITTA) in 1983 and the launching of the Tropical Forestry Action Plan (TFAP) in 1985 (Gale, 1998).

Both initiatives were the end result of negotiations among stakeholders, including MNCs, and started as early as 1977. The ITTA resulted from a series of meetings of the International Tropical Timber Organization (ITTO), a group of state delegates from tropical-timber-producing and -importing countries aiming to regulate trade in a manner satisfactory to both parties. The TFAP was rooted in the World Bank's 1977 forest policy and developed from a partnership between the FAO, the United Nations Development Program, the World Resources Institute, and the World Bank (World Bank, 1977). By the end of the 1980s, both initiatives were under fierce criticism by environmental organizations (Kolk, 1996). The end result of TFAP's and ITTA's environmental failure has been, as we will review, a renewed pressure for international regulation of forest exploitation.

TFAP

The objective of TFAP was to help countries in both protecting their forests and extracting maximum sustainable benefits from them. Because these interests are often in conflict, local implementation of TFAP actually promoted higher rates of primary forest clearing (Colchester & Lohman, 1990). Criticism was also aimed at the design of TFAP, indicating that the plan was donor driven rather than country driven. In addition, TFAP's administration was criticized for being too centralist, preventing participation of a broad spectrum of stakeholders, lacking clear priorities, and proceeding too slowly and ineffectively (Kolk, 1996). Pressure on the plan was such that by 1990, FAO authorized an independent review that basically confirmed most of the criticisms (Hunter, Salzman, & Zaelke, 1998), and the program is being phased out.

The failure of TFAP as a forest conservation initiative signaled a period of major activity in international forest negotiations. Three negotiation arenas are highlighted here, including the World Bank, the ITTA, and the Intergovernmental Forum on Forests (IFF). The involvement by MNCs in these negotiation processes will be discussed in the next section of the article.

World Bank

By 1991, the World Bank published a review of its former forest policy (World Bank, 1991a) and an important new forest policy document stating that "the bank will not under any circumstances finance commercial logging in primary tropical moist forests" (World Bank, 1991b, p. 13). At present, the World Bank's action on forests—in collaboration with the World Wide Fund for Nature (WWF)—aims to protect 50 million hectares of natural forest of high biodiversity value and sustainably manage 200 million hectares more by 2005. This sort of target and timetable

reflects a very real concern but has no legally binding authority; thus, it is not likely to effect change in forest sector corporate activity.

In addition, the World Bank has recently developed various initiatives streamlined with its 1991 Forest Policy. These include the Forest Policy Implementation Review and Strategy (FPIRS) and the CEO ad hoc Forum. The latter is an informal series of ad hoc meetings bringing together forest industry CEOs, representatives from major environmental organizations, and World Bank staff to encourage discussion and clarify issues related to forest conservation and management. FPIRS is an internal review process relying on regional consultative meetings to provide critical analysis of the bank's forest policy and recommendations for change. Neither of these recent initiatives is likely to influence most corporate actors because these are reviews and discussions, not legally binding agreements among parties.

ITTO and ITTA

Finally, between late 1992 and 1994, the ITTA was renegotiated. The meetings for the new ITTA were dominated by the disagreement on whether to keep the focus on tropical forests or to enlarge the scope of the agreement to all types of forests. Countries that consume tropical timber were against a larger scope, whereas producer countries favored it. This deadlock was broken by a United States and Australia proposal that resulted in a nonbinding consumer country commitment to sustainable management of their own forests by the year 2000 (Fry, 1993, cited in Kolk, 1996).

The ITTO year 2000 deadline generated a new wave of international negotiations on forests and forestry. First, there was widespread discussion on criteria and indicators for sustainable forest management. The latter concept has been examined from both the scientific and technical points of view (Aplet, Johnson, Olson, & Sample, 1993; Nollkaemper, 1996). Concurrently, there has been a proliferation of timber certification schemes, both within industry and by third parties, aimed at enforcing commitment toward sustainable forest management as defined in various manners.

IFF

In 1992, the United Nations Conference on Environment and Development (UNCED) at Rio de Janeiro approved the "Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests." These "Forest Principles" were the starting point of protracted negotiations addressing the possibility and content of a forest convention. This process currently counts its 8th year through the IFF, an institution that inherited the functions of the extinct Intergovernmental Panel on Forests (IPF).

The fourth meeting of the IFF ended in the 2nd week of February 2000 in New York City, but it failed to produce a hoped-for forest convention. There is disagreement among nations, and even industry players, on the merits of developing a legally binding instrument, for example, a world forest convention, as well as a divide that does not necessarily follow north-south lines (Earth Negotiations Bulletin, 2000). The strongest consensus possible from the negotiation was to "consider with a view to recommending [to the General Assembly of the United Nations] the parameters of a mandate for developing a legal framework on all types of forests" (Earth Negotiations Bulletin, 2000). Thus, we can expect the discussion on the forest convention to continue circumventing any legally binding agreement, at least in the near future.

A General Framework for Studying MNCs in Environmental Regimes

The basic academic consensus on the interaction between MNCs and international environmental policy is that influence travels both ways (Choucri, 1993). One can formulate two types of questions: first, What do MNCs do to policy? Or, What are the targets and tactics that guide MNC action on influencing the creation of regulation? Second, What does policy do to MNCs? That is, how do MNCs respond to regulation once it is created and put into practice? The corollary of this consensus is that if MNCs are part of the problem in international environmental issues, then they must be also part of the solution.

Information is more readily available on how MNCs respond to regulation than on how they influence it. Mayers and Bass (1999) claim that international policy initiatives have had a major impact on corporate efforts. Compliance or noncompliance with regulation is not an ambiguous issue. When it happens, compliance is highly visible because MNCs tend to advertise their adherence to environmental regulation as part as their public relations strategy.

It is much more difficult to understand MNC influence on policy development, which is our goal here. Official industry representation in international policy negotiation is minimal. For example, in the IFF meetings, attendants are country delegates that may or may not include industry representatives, who may or may not disclose their status as industry representatives (Earth Negotiations Bulletin, 2000). In addition, because competition is the norm among private sector actors, there is little incentive to form a cohesive interest group (Mayers & Bass, 1999). Thus, industry often takes a preemptive rather than constructive approach toward environmental regulation; therefore, there is little to gain from leaving traces of influence in the process. Exceptions occur

when MNCs can claim to be taking a progressive and environmentally conscious stand and they advertise this widely.

STAGES OF CORPORATE ACTION

Mayers and Bass (1999) suggest that larger companies with significant economic and political power may operate outside formal forest policy frameworks or avoid involvement altogether by (a) exploiting a policy or enforcement vacuum, (b) exploiting loopholes in policies and regulations, and / or (c) building and exploiting high-level patron-client relations. Barring these scenarios, and based on the heuristic framework described above, we derived a pattern common to MNC intervention in the international ozone and climate change regimes,[5] and we identified three stages of corporate action in international environmental policy. First, the relevant corporate actors avoid eventual regulation by discrediting the scientific basis for environmental policy. This is achieved through different means, including, among others, funding basic research by sympathetic scientists, diverting attention to alternative sources of environmental harm that are not related to corporate activity, and arguing that the social costs of the change are insurmountable.

In the second stage, corporations condition their collaboration with the growing regime on the inclusion of policy options that allow for minimal—or no—adjustment costs. This has only been observed when international regulation seems inevitable, as negotiations progress and the likelihood of enforcement increases. This means that the willingness to comply with regulations, which are still in a developing stage, is enforcement driven and limited by the perceived losses in competitive advantage among MNCs. Because operation methods differ among corporations, this may also result in a negotiation gridlock among countries striving to minimize costs for domestic industry by endorsing regulations that copy preexisting national regimes.

If a regime is successful in stimulating alternatives, market incentives change so dramatically that it becomes profitable for MNCs to comply with environmental regulations. This is the final stage: performance-driven corporate participation. If incentives and disincentives built into regulations fail to bring about this stage, successful operationalization and domestic implementation of the regime become impossible. This objective has been more effectively accomplished in the ozone regime (see Note 5), whereas in other contexts it has proven elusive. For example, collaboration has been low in the climate change regime until very recently, except for corporations that profit from alternative energy sources (Levy & Egan, 1998).

5. Our model is based on the evolution of the ozone regime as documented in Haas (1993), Downie (1993), and Litfin (1994), and the characterization of corporate action in the climate change regime by Levy and Egan (1998).

MNC Intervention in the Forest Regime

Companies endeavor to expand trade volume and access to sufficient quantities of timber on lands they do not necessarily own. Depending on how sound their current practices are, and which of these is threatened by regulation, companies will intervene differently in international forest initiatives. Although profits are the bottom line for all companies, some have made greater strides than others in responding to public concern for the environment or at investing in improving the sustainability of their landholdings. In the following sections, we illustrate the model of corporate action introduced earlier with examples from the forest-related industry.

STAGE 1: AVOIDING THE EMERGENCE OF REGULATION

MNCs Are Not Main Actors in Deforestation

MNCs' intervention in the forest regime tends to downplay their responsibility in forest decline. Perhaps the most pervasive slant in the forest debate lies in the discussion on the underlying causes of deforestation. Both international institutions such as the FAO and transnational business groups such as the World Business Council for Sustainable Development (WBCSD) rank commercial logging as a minor causal factor in global forest decline.[6] Rather, they attribute the bulk of deforestation and subsequent impoverishment of the land to rural poverty and misguided infrastructure development programs.

Redefining Forests

Other corporate actors have avoided responsibility for deforestation by calling for a more comprehensive definition of *forests*. For example, the Deputy Minister of Primary Industries of Malaysia proposes that the term

6. In issues of deforestation, forestry, or forest conservation, available data can be interpreted in contradictory ways. Generally accepted figures from the Food and Agriculture Organization of the United Nations (FAO) are used with two large caveats: Only thorough felling is considered deforestation, and figures are derived from voluntary reporting. FAO estimates on forest cover also include afforestation, reforestation, and managed plantations in their calculations; thus, countries in which forests are hardly natural enter the figures as increasing their forest cover in a deliberate conflation between natural and anthropogenic forests. Seemingly more objective estimates such as those based on satellite imaging still require critical analysis because visual interpretation depends on variable parameters that often require expensive and lengthy ground truthing (Abramovitz, 1998; Carrere & Lohman, 1996; FAO, 1999a; Hunter, Salzman, & Zaelke, 1998; International Institute for Environment and Development [IIED], 1996; Wood & Skole, 1998).

> should include land covered with tree species besides just forest species and to include monocultural areas such as oil palm and rubber plantations . . . as they also *perform similar functions* [italics added] as forest species in terms of carbon sequestration, biodiversity, and the provision of timber and non-timber products.[7]

This statement is incorrect on the following two grounds: First, plantation forests rarely host more than a fraction of the biodiversity that natural forests do; and second, because they are more vulnerable to pests and diseases, plantation productivity may be easily compromised in the long run (Evans, 1999).

Greenwashing Forest Clear-Cutting and Plantations

Such claims from industry representatives may try to dispel concern about corporate mismanagement of forest resources. Nevertheless, concern for the forest problem and accusations of deleterious corporate activities by environmental watch groups are strong enough to require industry to launch defensive campaigns. To accomplish this, corporations tout the environmental value of plantation forestry or the cost-effectiveness of clear-cutting versus natural forest management. Weyerhaeuser, a leading multinational forest products industry, defends its practices in its promotional materials: "Clear-cutting, replanting, and other forestry techniques enable Weyerhaeuser's forests to produce more than twice the wood volume of a comparably sized unmanaged forest, thereby allowing preservation of other forests for wildlife, aesthetics, recreation, etc." What the company fails to mention is that conversion of natural forest to plantations is still going on at a rapid pace purportedly to meet a rising global demand for wood products (Carrere & Lohman, 1996; IIED, 1996). By claiming that plantation forests are environmentally sound, and indeed necessary, they divert concern from the fact that the land had been natural forest and that natural forest cover is on the decline.

Divesting Operations From Environmentally Salient Areas

A second approach to avoiding direct impact of current or future forest policy restrictions is for MNCs to divest their operations from tropical forests (Gillis & Repetto, 1993). This trend was more evident in the 1980s when some governments of tropical producer countries banned or otherwise restricted the export of unprocessed logs (MacKerron &

7. Y. B. Dato' Hisamuddin Tun Hussein, deputy minister of Primary Industries, Malaysia, in his opening speech to an East and Southeast Asia regional meeting in support of the Costa Rica–Canada Initiative on international arrangements and mechanisms to promote the management, conservation, and sustainable development of all types of forests. Kuala Lumpur, Malaysia, August 2 to 5, 1999. [Online]. Available: www.kpu.gov.my / english / asia / ese2.htm

Cogan, 1993). Indeed, this divestment by MNCs in the wake of environmental activism is what makes developing producer countries strongly oppose further restrictions on forestry practices (Gillis & Repetto, 1993).

An example of this is a pledge by Weyerhaeuser to only purchase tropical hardwoods from U.S.-based importers, thereby avoiding a direct link to timber harvest operations overseas (MacKerron & Cogan, 1993). Companies that have divested from tropical timber countries in some cases maintain close ties with former affiliates. For example, the former manager of Georgia-Pacific (G-P) in Brazil purchased the plant when G-P pulled out of the country and continues trade relations with the company (MacKerron & Cogan, 1993). A notable exception to the divestment trend is Champion Paper International, whose wholly-owned subsidiary Champion Papel e Celulose recently purchased just more than 400 thousand hectares of lands in the State of Amapá, Brazil, encompassing both forested and deforested areas. Although the company has worked closely with state and federal officials in Brazil to ensure that its operations are in compliance with land use regulations,[8] the eucalyptus plantation will nevertheless cover vast acreage, dramatically altering the environment and ecosystem function.

Environmental Disagreement

Knowledge only becomes politically salient when there is consensus in the pertinent epistemic community (Haas, 1989). Industry may also refuse to act on the international forest regime because there is little agreement on the problem itself and its solutions. There are strong conflicts over the definition of *forest*, countless definitions of *sustainable forest management* (SFM), and a phenomenal number of criteria and indicators for SFM (Ruitenbeek & Cartier, 1998). There is general disagreement within environmentalist circles on what needs to be and can be protected.[9] This disharmony remains an obstacle to the development of an effective regime.

Illegal Practices

It is important to note that despite national and international efforts to regulate logging operations and ensure fair trade, some companies will

8. One such regulation is that natural forest must be maintained on 50% of a private landholding (C. Owen, "A consensus plan for conservation of habitats in Amapá, Brazil." Presentation at the Yale Forest Forum, Yale School of Forestry & Environmental Studies, February 20, 1999.)

9. In a report from World Bank's CEO ad hoc Forum (Online document), the industry representatives in the working group on protected areas posed the following three questions to the conservation representatives: (a) What does the conservation community agree on? (b) What areas of the world should be subjected to strict protection and why? and (c) Can the conservation community present cohesive guidelines on where and under what conditions forest production activities can take place? The answers to these questions remain uncertain because the conservation community has failed to reach a consensus.

choose to avoid compliance by conducting illegal practices and engaging in corrupt interactions. It is widely recognized that the political and financial influence of large corporations interested in gaining profit from forest products in some countries allows them unfettered access to otherwise restricted areas. Under current practices, the majority of logging operations in Southeast Asian countries is illegal (Environmental Investigation Agency, 1996; Marshall, 1990). For example, a recent report by Global Witness (1999) lists illegal activities by 12 concessionaires in Cambodia, 9 of which were international corporations.[10] Their activities include, but are not limited to, logging before obtaining exploitation permits, logging in wildlife refuge areas, clearing undersized logs or logging after bans, illegal export, underreporting of logs, and even collaborating with the Khmer Rouge (Global Witness, 1999, p. 10). These MNCs and the local logging companies will profit from unrestricted access to timber as long as the governments of producer countries lack sufficient capacity and/or political will to implement, monitor, and enforce national or international regulations (Crossley & Points, 1998).

CONCLUSION

There is little need for MNCs to become involved in the international forest regime because (a) there is little agreement among the proponents of such a regime on the cause and extent of the problem and on solutions, (b) states gain short-term profits from unsustainable exploitation and thus represent corporate interests in their delegations, and (c) both international and domestic regulations on forestry practices will not or cannot be enforced. These obstacles have been readily utilized by MNCs, or those representing their interests, to deny that a deforestation problem exists and/or avoid their implication in it.

STAGE 2: ENFORCEMENT-DRIVEN COMPLIANCE

In the second stage of MNC participation in policy development, industry stresses the adjustment costs and societal effects of regulations being discussed by advocating self-imposed voluntary measures (as opposed to international regulations, especially trade sanctions). Some business groups, such as forest products trade associations (see below), have taken the lead in responding to public concern over the global forest situation by developing their own measures to address the forest problem. In some cases, these best practice measures have been developed to comply with national or state regulations.[11] The most common

10. Five from Taiwan, two from Malaysia, and one each from Japan and China.

11. For example, to comply with Section 319 of the 1987 U.S. National Water Quality Act, Weyerhaeuser developed best management practices guidelines in conjunction with the Arkansas/Oklahoma Forest Council.

measure taken by MNCs and trade associations representing them is to develop and follow sustainable forest management goals through SFM certification or verification schemes either by industry itself or by third parties.

Principles and Practices of SFM by Trade Associations

Trade associations such as the American Forest & Paper Association (AF&PA), the Canadian Pulp and Paper Association (CPPA), and the Timber Trade Federation (TTF) of the United Kingdom, among others, have taken up the initiative to develop certification schemes largely in response to market and environmental NGO pressure. Through a consultative process with some of its members, academics, and researchers, the AF&PA developed the Sustainable Forestry Initiative (SFI) in 1994, according to promotional materials a "comprehensive system of principles, objectives, and performance measures that integrates the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil, and water quality."

A requirement for membership in the association is a commitment (and annual reporting) to implement the principles and practices of SFI in the firm's domestic operations. In fact, the association dropped 15 companies from membership for noncompliance since the inception of the SFI program! But compliance is not required of company operations overseas. Some companies, such as Weyerhaeuser, say they adhere to SFI principles and practices in their foreign operations, but according to M. Koulombe of AF&PA, most rely on the regulations of the host country to direct their activities.[12] Others do follow international guidelines: Champion's Brazilian subsidiary Champion Cellulose e Papel operates under the International Organization for Standardization (ISO) 14001 standards, and in Canada, evaluation of private forestry operations comes under both ISO and Canada Standards Association's (CSA's) systems certification schemes.

Certification and Verification Schemes

Environmental NGOs have been instrumental in putting forest management certification on the global forest policy agenda (Donovan, 1996). Some, in particular the Forest Stewardship Council (FSC), have championed the idea as a voluntary "soft" policy tool and alternative to regulatory tools. According to P. Mallet from the Forest Stewardship Council,[13] there has been little direct input by nonretail industry in the development of the FSC system, which is largely NGO driven. The retail industry has been more involved due to the desire to see increases in volume of certified wood and products stemming from increasing con-

12. Personal communication, October 18, 1999.
13. Personal communication, October 6, 1999.

sumer demand. For example, 3 of the top 10 U.S. giant home improvement retail stores have responded to consumer pressure and promised to stop selling (and buying) timber extracted from endangered old-growth forests.[14]

In response to public expectations and a rapidly evolving market for wood and wood products harvested from verifiable SFM systems, AF&PA established a voluntary verification process to enable companies to publicly document and communicate their conformance to the SFI standard. Today, the initiative offers flexibility whereby companies may, according to promotional materials,"conduct a self-verification; have the customer or another company verify conformance; or contract with an independent third party to conduct the verification." In 1998, the program opened to nonmember landowners for SFI licensing to broaden the diversity of stakeholders in the program.

The association recently instituted a third-party audit option. In November 1998, Champion International became the first company to commit to this option for reviewing operations on all its timberlands. Champion has since had two sites audited by a team from PricewaterhouseCoopers, with mixed reports of good forestry practices and protection services and noted room for improvement, especially in streamside management zones (Champion International promotional materials). C. Owen, vice president for forest policy at Champion, offered that although the ideas of SFI are acceptable to the company, their implementation will be difficult.[15]

Another example of a forest system certification scheme is the CSA national scheme for management system certification. The Standards Council of Canada passed this initiative in 1996 in accordance with the desires of Canada's major industry associations, CPPA and Canadian Private Woodlot Owners Association. The voting technical committee that developed the plan included equal representation by producer interests, professional/research, environmental/general interest (including the National Aboriginal Forestry Association), and government. The standards, covering six forest principles and more than 80 indicators of SFM, are based on the generic ISO 14001 and 14004 Environmental Management System standards.

Environmental Critiques

The voluntary efforts from companies and trade groups to develop and implement their own environmental policies or to follow guidelines set by an independent group such as the FSC are certainly commend-

14. HomeBase recently announced a plan to phase out purchasing and selling old-growth wood products following similar announcements by The Home Depot and Wickes (Rainforest Action Network press release, November 8, 1999).

15. Personal communication, October 22, 1999.

able. These efforts may be a necessary condition for addressing the forest issue but are not sufficient to ensure the attainment of conservation and sustainable exploitation goals. Because they are implemented on a piecemeal basis and offer little competitive advantage at the exploitation end of the trade chain, they amount to a small dent in the larger deforestation problem. Furthermore, there is no hard evidence that these approaches are having an impact on the ground or even the forest product market itself in the long run (FAO, 1999b; Kiekens, 1999).

Although trade association initiatives such as the SFI are endorsed by a number of state legislative bodies, some opponents are critical. They view this as "a classic example of the fox guarding the henhouse" (FAO, 1999b) or as "a big lie—a giant smokescreen" (M. Baker, former member of International Hardwood Products Association, cited in MacKerron & Cogan, 1993, p. 73).

The initiative behind independent wood product certification has come from environmental NGOs rather than industry, but its effect at a global level hinges on MNCs' capturing the wave of consumer concern and reinvesting its market benefits in sustainable forest management. Nonetheless, there are no examples that would prompt corporations to follow the leadership of a large-scale successful attempt at SFM. Nor are there any large-scale market incentives in place today: The price at which timber is acquired by MNCs seldom reflects its inherent value or internalizes for environmental services; hence, market profits do not directly benefit commodity suppliers. In fact, some companies openly decide not to engage in certification because they do not perceive a market demand for certified products. Amacol, a Brazilian subsidiary of Kiani (U.S.), exported a total of U.S. $12 million in wood products to the United States without certification. In the words of Amacol's sales director, "there is no demand for certified wood. . . . In the U.S., the customer is not willing to pay extra for it" (Cotton, 1999). MNCs play a dual role in maintaining this status quo; because of economies of scale, they refuse to operate where commodity prices reflect both timber and environmental value, and through networks, they influence domestic policy to their advantage.

STAGE 3: PERFORMANCE-DRIVEN COMPLIANCE

The international forest regime is so weak and flawed that there are few inherent economic incentives for MNCs to enter the third stage of compliance. There is an incipient but minimal market for certified wood and wood products, which exerts some pressure on MNCs, but it is largely geared toward a specialized niche. One example is Madeireira Itacoatiara Ltda (MIL), a Swiss-controlled Brazilian company specializing in precious woods. MIL has received the "green seal" from FSC and is often complimented as an example of rational forest management in

the Amazon. MIL's exports in 1996 were only U.S. $83,717 (Cotton, 1999). Industry is justifiably concerned about the shift in consumer preference toward certified products when demand exceeds supply (Higman, Bass, Judd, Mayers, & Nussbaum, 1999). Moreover, because "no investments in SFM will be sufficiently attractive until the option of harvesting valuable wood at nominal costs in public forests is effectively brought to an end," market pressure alone cannot result in an effective regime until there is little natural forest left (FAO, 1999b).

With rising demand for sustainably produced wood products from consumers, however, there may be pressure from shareholders toward changes in corporate behavior and adoption of SFM practices by publicly owned companies. Although these are estimated to process just more than half the industrial roundwood from all commercial forests, privately held companies continue to wreak havoc in poorly regulated areas. Nevertheless, it is believed that "if the changing practice of publicly quoted companies enhances demand for forest products that reflect superior environmental practices, privately owned companies will also feel that pressure" (Crossley & Points, 1998).

Buyers' groups, largely under pressure from consumers, are to some extent insisting on certification as a proof of well-managed sources for their supplies. For example, European buyers are putting pressure on Brazilian suppliers to provide certified wood. MIL, the Brazilian company mentioned above, owns the only FSC-certified native forest in Brazil at the moment. It covers 80,000 hectares—hardly enough to provide to a large, environmentally conscious consumer group (Milliken, 1999). Moreover, the domestic market for sustainably harvested timber should not be overlooked: In Brazil, 86% of its hardwood is traded within national boundaries (Milliken, 1999).

National certification schemes are being developed as well. The Finnish Forest Certification System, led by nonindustrial forest owners and endorsed under the Pan-European Certification Initiative, was launched in June 1999 and may be the first of these to be implemented. Malaysia is developing its own criteria and indicators based largely on ITTO guidelines. The African Timber Organization is attempting to develop a regional scheme also rooted in the ITTO criteria and indicators, but this process is slow and may be prone to the corruption and enforcement problems mentioned before (Kiekens, 1999).

There are many problems with relying on the voluntary soft policy of certification to stimulate companies to improve their forest practices. It must be pointed out that certification is another voluntary instrument, "relying on international trade and the willingness of consumers to secure certified forest products" (Kiekens, 1999), and it has not resulted in improvements in the pace of deforestation. More important, this strategy has not been applied at a scale large enough to change the

structure of the market and generate the momentum necessary to result in industry-wide changes.

Conclusion

Only time will tell whether MNCs are able to balance their interest in short-term profits with long-term sustainable exploitation objectives, as called for by the existing forest regime. Despite two decades of efforts to curb deforestation, international policy has been ineffective, at best, in dealing with global forest decline. For now, a great deal of responsibility in effecting changes toward sustainability is placed on local governments. In the meantime, globalized trade has seen forest product prices spiral downward, which does not bode well for instigating (costly) sustainable management as prescribed by the international forest regime.

Among international initiatives around the forest issue, the international community has placed great hope, and invested considerable time, in exploring a global forest convention through the UNCED-IPF-IFF process under the Commission on Sustainable Development. The insufficient capacity of national agencies, lack of political will, and corrupt activities in the forestry sector would likely undermine the implementation of a global forest convention. These and other factors currently impede the enforcement of existing forest-related provisions under the Convention on Biological Diversity, the Convention to Combat Desertification, and the Framework Convention for Climate Change (Crossley & Points, 1998).

On a more positive note, policy development at international fora involving an array of stakeholders, although initially inviting more conflict, may eventually reveal common ground and certainly will yield policies that are more readily implemented and regulations that are enforceable. For example, the participation by industry representatives in the Convention on International Trade in Endangered Species of Wild Fauna and Flora's (CITES's) Timber Working Group has resulted in suppression of certain timber species from the CITES Appendices, but at the same time, it was helpful in developing practical measures for adapting CITES regulations to the timber trade.[16]

Partly because enforcement problems plague international conventions, MNCs have largely remained marginal to forest-related international negotiations. Nevertheless, MNCs that advocate strengthening the regime through a forest convention do so because (a) their adjustment costs are nil, already having implemented sustainable forestry practices as a response to local regulation, or (b) such an instrument

16. Nina Marshall, Critical Ecosystem Partnership Fund, Conservation International, personal communication via e-mail, November 24, 1999.

would reflect the lowest common denominator in forest protection and thus would not result in change of current practices. MNC influence in these negotiations has been largely indirect through lobbying or in a more formal advisory role to national delegates.

Mayers and Bass (1999) argue that the strength of the global forest regime lies in supporting national sovereignty over forests and that bolstering national policy implementation and monitoring is the most effective approach to carrying out the international forest policy agenda. For this to happen, logging companies must be held accountable for destructive forestry operations through enforcement of domestic regulations and international market pressure. At the same time, governments must stop undervaluing their forests through inequitable concessions and exploitative patron-donor relationships.

In the context of the existing forest regime, we have identified three different types of intervention, the last two of which are still poorly represented by forest product MNCs: avoidance, enforcement-driven compliance, and performance-driven compliance. Why the regime has not achieved performance-driven compliance from MNCs remains a valid question; the regime itself is weak and has little support from states internationally and domestically. One could hypothesize that MNCs have been so effective at avoiding or conditioning compliance that incentives for complying fully with the regime are nil, but more evidence of direct intervention at the international level is necessary to substantiate this claim.

Along these lines, one avenue for future research lies in tracing domestic channels of corporate influence that shape government positions at international negotiations. Although we have not treated this dynamic here, it is apparent that MNCs and trade associations have a strong advisory role in this respect. Because negotiations for a forest convention have been effectively stalled because of lack of consensus among states, this may yield clearer insights into the effects of corporate policy on global environmental regimes.

EPILOGUE

Since this article was first submitted, the stakeholders in the international forest regime have convened at another IFF, as well as numerous public and private forest initiatives. We provide the following short list of Internet sites for relevant updates:

- Food and Agriculture Organization of the United Nations–Forestry, available: www.fao.org / forestry / Forestry.asp
- Forest Policy Implementation Review and Strategy and CEO ad hoc Forum of the World Bank, available: www.worldbank.org /
- Fortune 500, available: www.fortune.com /

- International Institute for Sustainable Development (IISD) Linkages Global Forest Policy, available: www.iisd.ca / forestry / forest.html
- International Tropical Timber Organization, available: www.itto.or.jp /
- United Nations Sustainable Development Intergovernmental Forum on Forests, available: www.un.org / esa / sustdev / forests.htm
- World Business Council for Sustainable Development, available: www.wbcsd.ch /
- World Commission of Forests and Sustainable Development, available: http: / / iisd1.iisd.ca / wcfsd / default.htm

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