

**PEOPLE, FORESTS, AND POLITICS IN COSTA RICA AND CHILE  
THE STRUGGLE FOR GRASSROOTS DEVELOPMENT-FRIENDLY INITIATIVES**

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## **PEOPLE, FORESTS, AND POLITICS IN COSTA RICA AND CHILE: THE STRUGGLE FOR GRASSROOTS DEVELOPMENT-FRIENDLY INITIATIVES**

Community forestry and reforestation, small-scale non-timber extractive activities, and agroforestry have long been advocated as means to operationalize the basic needs and social equality components of the concept of sustainable development. The conditions under which movements supportive of grassroots development strategies emerge and the analyses of their projects has been the subject of an increasingly voluminous literature. In an important advance, a number of analysts have recognized that political factors were necessary aspects of the struggle to implement grassroots development projects; for without political action policy prescriptions are rarely transformed into actual policy (Goldsworthy, 1988). More recently, some advocates of grassroots development strategies began to observe that without compatible political-legal frameworks and national incentives, grassroots development initiatives ran grave risks of either failing (Richards, 1997), not emerging, or never being scaled up from a handful of isolated projects.

Still, the political analysis of the conditions conducive to outcomes supported by the pro-grassroots development ecological, peasant, and native people's movement remains undertheorized (Silva, 1997; Hurrell, 1991). This is especially true of the politics of establishing grassroots development-friendly political-legal frameworks for the sustainable development of the forest. This paper seeks to contribute to the analysis of this last question. I argue that four clusters of variables—state structures, social forces, international factors, and ideas—shape the pro-grassroots development movement's opportunities to become members of larger coalitions; and that those coalitions determine the power pro-grassroots development forces muster to influence policy making. However, the effectiveness of pro-grassroots development coalitions also depends on the configuration and countervailing power of alliances among social forces, state actors, and international actors opposed to them.

Costa Rica and Chile are useful cases for a number of reasons. Both have recent forest legislation promoting grassroots development that has been either enacted or is pending with the expectation of approval. Chile provides variation with respect to outcomes because it has a second bill with a grassroots development component in the policy process that, for all intents and purposes, has been defeated. Costa Rica and Chile also offer a nice contrast with respect to explanatory factors: international variables were significant in Costa Rica and largely relegated to background conditions in Chile. Thus, we can explore the relative significance of domestic versus external variables. The two cases also differ on a second key dimension: the strength of the timber industry: high in Chile and low in Costa Rica. This further highlights the relative significance of domestic versus external factors. Before exploring the politics of grassroots development-friendly policy making in these two cases, the next two sections specify what is meant by a grassroots development approach to the sustainable development of the forest and outline the framework for analysis. The conclusion returns to the theoretical implications of the paper.

### **GRASSROOTS DEVELOPMENT AND THE SUSTAINABLE DEVELOPMENT OF FORESTS**

In public policy circles, there is widespread agreement that sustainable development—making environment compatible with development—rests on four principles: a healthy economy, social equity, environmental quality, and participation (WCED, 1986; World Bank, 1992). However, there are sharp differences over how to achieve these values (Redclift, 1987 and 1992). One strand of the debate favors

mild reforms to the existing market-based organization of economy and society, reforms mainly based on the addition of technical solutions to the environmental consequences of existing problems (Pearce and Turner, 1990; Pearce and Warford, 1993). The field of environmental economics addresses many of those issues (Carlie and Christie, 1993; Goldin and Winters, eds., 1995; Van den Bergh and Van der Straaten, eds., 1994).<sup>1</sup> An alternative approach questions this path's consequences for meeting the basic needs—or livelihood requirements—of impoverished populations, especially in the rural areas of the developing world; it is skeptical of the impact on long-term environmental quality; and it doubts meaningful participation can be achieved (Redclift, 1992; Hampson and Reppy, 1996; Commoner, 1990; Schumacher, 1973; Daly, 1977; Pepper, 1993).

At the heart of the alternative, or grassroots development, approach lies a deep seated conviction that the expansion of free-market economics hinders achievement of the egalitarian, ecological, and participatory goals of sustainable development (Painter and Durham, 1995; Annis, ed., 1992). Instead, attaining these values in rural contexts requires developing local communities and small-scale economic activity on the basis of sustained-yield practices. It privileges the values of local autonomy, solidarity, self-regulation, and citizen participation in decision-making over the penetration of market forces and the reduction of participation to the implementation of a few projects. From this perspective, the livelihoods of peasants and small farmers are better served by organizing communities and building build small scale enterprises. The assumption is that under these conditions, more of the income generated stays in the community in the form of higher wages, social benefits, and capitalization. Economic sustainability also depends on the formation of cooperatives to pool resources and know-how, and of linking them to local, regional, national, and world markets.

Proponents of grassroots development appreciate nature for its intrinsic and instrumental value. Due to the interconnectedness of nature, excessive human intervention in any one area damages the whole web of life. As a result, the grassroots development approach contends that environmental sustainability is better served by small-scale use, because, together with appropriate technology, it offers a better opportunity to mimic natural processes.

A significant strand of the grassroots development perspective takes a different stance from current neoliberal trends with respect to the role of the state and social participation.<sup>2</sup> The state has an important role to play in the crafting of industrial and extension policies favoring grassroots development. Thus, the strengthening of state institutions is vital to carry out increased functions. Otherwise, community enterprises, networks of cooperatives, and links to markets are not likely to flourish beyond a few individual instances. NGOs are considered central to this process, as well as the inclusion of social groups in the policymaking process. But at its irreducible core, participation is about a focus on organized communities as a vehicle for the self-determination of subordinate class and ethnic-based social groups (Friedmann and Rangan, 1993: 1-10; Ghai, 1994: 1-12; Ghai and Vivian, 1992: 1-19). Moreover, participation extends to broad deliberation by organized civil society in defining policy agendas, prescribing solutions, and formulating policy as well as helping to implement it.

With respect to the sustainable development of the forest, grassroots development approaches in the public policy debates favor community forestry and reforestation. Organized peasant or indigenous communities help design, implement, and manage timber extraction under small-scale, low impact, sustained-yield practices. At minimum, this demands knowledge of the growth and regeneration properties of commercial species, an inventory of the same, rotation schedules, protection of watersheds and other sensitive areas, and secure land tenure. Use of secondary products and small-scale reforestation for fuel-wood and construction materials is also encouraged because they address two major sources of deforestation by forest dwellers and peasants.<sup>3</sup>

Forests, however, also have multiple uses and the grassroots development approach urges organized communities to mix forestry and reforestation with agroforestry, intercropping, and nontimber extractivism (Browder, 1989). Agroforestry refers to techniques that combine cattle or native fauna

ranching and agriculture with either standing forests and/or plantations. Intercropping is a practice compatible with reforestation for plantations or watershed protection. Compatible crops are planted in between the tree seedlings. This provides a material benefit to the owner of the land, who then does not have to forgo all of the benefits of the land while he/she waits for the trees to mature. Nontimber product uses of the forest include the extraction of non-timber products from the forest, pineapples, palm hearts, rubber, nuts, honey, spices, and assorted fruits and seeds. Extractive reserves have become a buzz word for areas specifically designated for such use.

Community forestry and related activities can take many organizational forms, most of which encourage cooperative behavior. Which organizational form emerges often depends on land tenure. Where communal land tenure prevails, the project tends to be run by leaders who have roots in the community. These often interpret their responsibility in terms of balancing the employment and redistributive benefits of the enterprise with the need for investment. Where land is owned individually, cooperatives pool resources. These usually involve warehousing, distribution, marketing, and the provision of financing and materials (seeds, implements, and training). If the participants in the cooperative form a tightly-knit community they may agree to pool savings for general services to the community (education, health, and infrastructure). Conversely, they may simply enjoy the individual benefits of increased income.

### **UNDERSTANDING THE POLITICS OF FOREST POLICY REFORM**

This paper examines the factors that influenced the inclusion or exclusion of grassroots development components to three pieces of new forest legislation: one in Costa Rica and two in Chile. Costa Rica's new law unambiguously gave incentives for grassroots development in native forest management and reforestation. Chile has two pieces of legislation pending. One is the native forest law, from which indirect incentives for grassroots development were expunged and which may not pass at all. By contrast, reform of reforestation legislation explicitly redirects support from large-scale industry to small-holders and peasants. There is every reason to believe this bill will become law. To account for these outcomes, this paper combines opportunity structure theorizing in the social movements literature with a more standard political economy approach.

I draw on political economy theorizing about economic and political change to explore how and when ideas, state structure, social forces, and international factors influence outcomes with respect to the inclusion or exclusion of grassroots development components to forest policy reform (Schamis, 1991; Smith, 1991). The choice of this literature seems relevant for two reasons. First, it addresses all of the major factors that allow one to disentangle the relevant actors, their interests, and the power resources at their disposal. Neither the state, society, the international arena or intellectual influences remain as "black boxes" (Silva, 1997). Second, this political economy literature addresses large-scale changes that, like the problem of sustainable development, involve difficult value choices.

With respect to the "how," at the most general level, international and domestic economic and political structures and ideas define actors, interests, incentives, options, and power resources. As Jeffrey Frieden (1991) has pointed out, such methodology is the stock and trade of political economy approaches. In keeping with international relations theorizing, at the broadest level, the policy preferences of international level actors such as the World Bank, the United Nations, and the U.S. and European governments constitute a permissive condition (Waltz, 1954). At the very least, their policy orientations and new international regimes generate diffuse pressure for change on national level actors (Keohane and Nye, 1977). However, as Stephan Haggard (1990) observed, they can also act more directly in the domestic policy making arena. At that, stage, as Rueschemeyer, Stevens and Stevens (1992) have argued, they augment the power resources of domestic actors. Where reform of forest legislation and decrees are concerned, the United States and the World Bank tend to support market-

oriented solutions; whereas the United Nations and the more social-democratic governments of Northern Europe and Scandinavia favor inclusion of grassroots development incentives.

Domestic economic and political structures define state actors and most of the social groups active in the policy process, as well as their power resources. In forest policy, these are mainly the lead agencies of the executive for this issue area, industrial timber interests, farmers, peasants, and indigenous peoples. In democratic regimes, political parties may also be significant actors. Much of the power of state actors flows from the authority vested in them by virtue of their position in the cabinet hierarchy. It also depends on the balance of power between the executive and the legislative branches of government. The capabilities of social groups, in large measure stem from their economic and organizational strength.

The degree of cohesiveness of state structure is also a key factor in weighing the relative power of social groups and state actors. Two features are important for gauging it. First, the cohesiveness of state structure partially depends on the permeability of state institutions to social actors in the policy making process. Where they are closed, state actors have more leeway of action than where organized social groups participate. Second, a clear hierarchy of ministries and policy consensus among the top leadership of those ministries can bias state institutions in favor of some social groups versus others, depending on the porosity of those institutions to social forces and bureaucratic practices. Conversely, fragmented interministerial relations often reflect splits among state elites, offering more of an opportunity for societal penetration if those institutions are also permeable to those groups (Krasner, 1989; Kaufman and Haggard, 1995; Skocpol, 1979; Jenkins and Klandermans, eds., 1995; Kriesi, et al., 1995; Tarrow, 1994 and 1996).

The policy stances of domestic actors have several sources. Extending Peter Haas's (1990) arguments, ideas about environment, development, and the causes of deforestation heavily influence the policy proposals of state actors. By contrast, the posture of business, farmer, and peasant groups largely derives from economic interest based on their situation in the structure of production.<sup>4</sup> Of course, material interests may dovetail with more intellectually-driven conceptualizations, forging a bridge between different actors (Keck, 1995). Indigenous peoples often draw from their cosmology and their material interests, i.e., protecting their territory and way of life.

However, important social forces—the environmental nongovernmental organizations (NGOs)—are not defined by domestic or international structure. In this paper, the term refers to not for profit organizations run by middle-class professional staffs, whose policy stances generally derive from their intellectual and scientific training. This means they can be advocates of either market-friendly or grassroots development approaches to the sustainable development of forests. Some of the large environmental NGOs of the developed world are significant international actors in their own right; domestic NGOs in developing countries can be important players in the local policy making process. Their power resources often hinge on their financial and organizational capabilities and the quality of the expertise available to them.

Mapping structurally specific actors, interests, and power, however, is only the starting point for analysis. Dynamic interaction between them usually accounts for policy outcomes. More specifically, policy outcomes depend on the dynamics of coalition formation between social groups, state actors, nongovernmental organizations, and international actors. These alliances, and the structural conditions they operate in, define the sum of power competing coalitions muster in support of alternative policy stances.

Because the state is not considered a unitary actor, the pattern of alliances between ministries and social groups are key (Migdal, 1996). A significant degree of power for both partners flows from the authority of the state institutions involved. To this, social actors add their relative economic and organizational capabilities. Moreover, in democracies political parties may become part of such coalitions, in which case the power of the legislature may augment or diminish the capabilities of competing alliances (assuming the legislature is not unduly subservient to the executive).

Establishing these linkages is particularly important for grassroots development. The social movements literature has argued persuasively that alliances between movement organizations and state actors is key for the success of movements (Jenkins and Klandermans, eds., 1995; Kriesi, et al., 1995; Tarrow, 1994 and 1996). This is especially true of movements struggling against established practices and that find themselves outside of the policy making process. Their chances of influencing policy reform in their favor improve to the degree they gain support from state actors significant to the issue area at hand. This assumes the state has some "porosity" to social groups. Moreover; the power of the alliance is strengthened to the degree that the state institutions backing the movement are higher up in the ministerial hierarchy and have support from other institutions relevant to the issue (cohesive state backing for the issue). Evidence for these dynamics exists for the forest sector (Keck, 1995; Silva, 1994).

To these findings of the social movements literature, however, must be added the fact that business sectors may also enter into alliances with state actors. Research on business-state relations has long noted such linkages (Evans, 1979, 1992; Schneider and Maxfield, eds., forthcoming). These coalitions, when present, may be thought of as competing or countervailing forces to the grassroots development coalitions. Conditions affecting which one prevails will be examined below.

Nevertheless, it is important to underscore that alliances are not exclusively between state and social actors. When present international actors and treaties can decisively increase the power of coalitions between domestic state and social actors because of their financial, organizational, and diplomatic capabilities (Haggard, 1990; Rueschemeyer, Stevens, and Stevens, 1992). Because external forces are not uniform in interest, they may support advocates of industrial or grassroots development. In short, complex, competing pro-industrial and pro-grassroots development alliances may include state, social group, and international actors.<sup>5</sup>

Having examined the how, what patterns do the Costa Rican and the Chilean cases suggest with respect to when in the policy process ideas, state institutions, social groups, and international factors affect forest policy as defined in legislative bills and decrees? The ideas of cohesive policymaking teams in the ministry charged with crafting policy were most important in the earliest stages of the policymaking process (the policy initiation stage) when ministries prepared the first drafts of legislative bills or decrees for the executive. In these cases they all intended to stimulate grassroots development. But once that first draft became public, society-centered, interest-based factors played the dominant role in the ensuing policy debate and its outcome. It was the strength or weakness of social groups, whether industrial or peasant, that, in the first instance, influenced the degree to which legislation and decrees that expressed the ideas of cohesive policy making teams prevailed. The strength of those social groups depended on their economic power, their degree of organization, and on their ability to forge alliances with government actors and benefit from their institutional power. The fact that the core of state support for the policy making teams was roughly equal across cases, and that the government's prograssroots initiative did not always prevail, underscores the key role played by society-centric factors. Finally, the role of international factors was clearest in Costa Rica, where they augmented the power of the domestic groups they supported. In Chile, although external factors were only background conditions, international concern over the environment played a permissive role by elevating the forest sector to a prominence it had formerly lacked in policy debates.

### **FOREST POLICY REFORM IN CHILE**

Chile emerged from over a decade and a half of labor-repressive military rule with a healthy, growing economy based on free-market economics. Exports of commodities in which Chile had a comparative advantage—timber, fruits, and fish products—were key to the new economic model. The civilian government that replaced the dictatorship, the Concertación de Partidos por la Democracia, vowed to retain the basic socio-economic model of the outgoing regime; but it was also committed to

redressing issues long neglected by it, including the environment (Drake and Jáksic, 1991). As a result, forest policy reform received relatively high priority in the Concertación governments of Patricio Aylwin (1990-1994) and Eduardo Frei, Jr. (1994-present). International focus on the issue added legitimacy to the enterprise.

### **Chile's Forest Sector**

Approximately 14 percent of Chile's territory is covered by forests, with well over 80 percent located in the south. Chile possesses around 7.5 million hectares of potentially productive temperate forests composed of native species, 1.75 million hectares of plantations of exotic species (not indigenous to Chile), mainly radiata pine but also some eucalyptus, and 1.4 million hectares of temperate native forests in the national parks system. Most of the forests and plantations are privately owned. Accounts by chroniclers and others reveal that Chile's forest cover was substantially higher in the past. Over time, vast tracts of native forests succumbed to agriculture, ranching, dairy farming, urbanization, fuel consumption, and logging. Moreover, logging based on highgrading—the rapid mining of commercial species—left behind native forests degraded both economically and in terms of their biodiversity (Núñez, 1994; INFOR, 1995; Donoso and Lara, 1996).

Beginning in the 1960s and accelerating in the 1970s, the shift to a timber industry largely based on commercial plantations of radiata pine lifted pressure on the native forests, and the rate of deforestation and forest degradation slowed significantly. Secondary forests, the product of regeneration in many logged and cleared areas, budded. The extraordinary growth of commercial plantations had its roots in an industrial policy sustained across different presidential administrations and even across varying forms of government. Under democracy, both presidents Eduardo Frei, Sr. and Salvador Allende gave incentives for plantations in the 1960s and early 1970s. The radiata pine grew faster in Chile than in North America, its place of origin, and promised to be a good cash crop, especially for the pulp and paper industry (Donoso and Lara, 1996; Mamalakis, 1982).

With the promulgation of Decree Law 701 in 1974, the military government, ironically later committed to free-market economics, introduced direct and generous incentives for pine plantations (Mamalakis, 1982; Gwynne, 1993, 1996). It gave tax breaks and subsidized 75 percent of the costs of establishing plantations (in some years, in fact, the subsidy was up to 90 percent). The area under cultivation surged. Chile had 200,000 hectares of plantations in 1974, plantations that had mainly reforested denuded areas of south-central Chile on soil no longer suitable for agriculture. Between 1975 and 1985, an average of about 83,000 hectares were added annually. By the 1990s, the rate accelerated to over 100,000 hectares per year (INFOR, 1995). A complementary decree that lifted prohibitions on the export of unprocessed wood in 1975 also contributed to the sharp acceleration of commercial plantations.

Although the forestry law of 1931 is still on the books, DL 701 and its amendments currently constitute the main body of applicable forest legislation in Chile (República de Chile, 1974, 1979). In addition to direct subsidies and tax breaks, DL 701 sets criteria for land use (forestry, agriculture, and other uses). It also regulates the silviculture of both commercial plantations and native forests.

On the whole, the achievements of this industry under the auspices of DL 701 were remarkable (INFOR, 1995; CORMA, 1991). From insignificant exports, timber developed into Chile's third largest export sector, with the bulk in wood pulp, but also round logs, wood chips, and even some more industrialized products. From only a few hundred thousand hectares of commercial plantations, firms planted nearly two million additional hectares. Continued high investment by national and international capital boosted national accounts (especially the capital account), an undeniable contribution to economic growth based on the expansion of production rather than portfolio investment (Gwynne, 1993, 1996). For example, in 1994, the forest sector exported US\$ 1.52 billion (13 percent of all exports), making timber a leading export product (INFOR, 1995). These economic achievements, however,

created a two-tier forest sector: the well-developed, economically profitable plantation subsector and the neglected native forest subsector (INFOR, 1991; CODEFF, 1992; CORMA, 1991; Donoso and Lara, 1996).

This style of forest sector development violated many of the principles of the emerging concept of sustainable development. First of all, the expansion of the commercial plantation subsector had a number of negative environmental and ecological effects. Although, commercial plantations initially mainly reforested barren lands not suitable for other uses, by the middle of the 1980s, timber firms and farmers began to substitute economically "worthless" native forests with plantations or alternative land uses (CONAF, 1993; PAF, 1992). This represented a clear diminution of biodiversity, as thousands of hectares of native forests per year (some estimate as much as 10,000 to 20,000 hectares per year) were clear cut (CODEFF, 1992). The trend continues unabated (Banco Central, 1995).

The "substitution" issue (as it is called in Chile) had two sources. In one variant, large timber firms bought tracts of native forest from medium and small-scale farmers, clear cut them, and established commercial plantations with exotic species. Regulations on forest management in DL 701 permitted this, providing the companies had approved management plans. The second incentive for the substitution of native forests came from international timber market pressures. World demand for wood chips exploded in the middle of the 1980s as a result of expansion in the pulp and paper industry. Trees and forests that previously had little economic value now generated quick cash. Timber companies could sell felled native forest to chipping companies as they cleared native forests for plantations. Small and medium farmers simply cut down their forests (frequently illegally) to sell as wood chips (Donoso and Lara, 1996).

With the success of the timber industry in these strategies, investments in plantations rapidly increased. This alarmed environmentalists. Companies could legally substitute native forest for plantations, and the monocrop cultivation of trees destroyed biodiversity and invited plagues. Habitat for flora and fauna, including many rare and unique species, stood defenseless against rapacious companies interested only in economic gain. Planned investments of over a billion dollars in southern forests offered a bleak prospect for their fate. The plantation-based timber industry's only interest in the native forest subsector was to destroy it (CODEFF, 1992).

This industrial development pattern violated another key principle of the well rounded, integrative model of sustainable development: that development attend to the livelihood or basic needs of impoverished populations. The industry was highly oligopolistic. A few firms in the capital-intensive pulp and paper sector controlled most of the industry; and these firms belonged to Chile's largest and most powerful conglomerates. Moreover, since the middle of the 1980s, Chilean companies have associated with foreign capital, and in the early 1990s foreign direct investment by large international corporations increased markedly (Gwynne, 1993, 1996; Rozas, 1986; Paeile, 1986). To be sure, the plantation industry offered some employment.<sup>6</sup> However, taking advantage of labor laws designed during the dictatorship, large-scale companies usually pay low wages and offer poor working conditions, although there are notable exceptions (Donoso and Bahamonde, 1994; Ormazábal, 1993). Moreover, since most forests are privately owned, large firms often put pressure on smallholders to sell or abandon their claims. This disrupts peasant communities, forcing abandonment of villages and migration to cities (Donoso and Bahamonde, 1994; Verscheure, 1996).<sup>7</sup> Finally, the regulations of DL 701 made it very difficult for smallholders to access its benefits, i.e., to establish small plantations and eventually reap the economic benefits of timber sales in well-established national markets. Of course, nothing in DL 701 promoted community forestry .

In sum, the structure of the timber industry overwhelmingly privileged large-scale enterprise over medium and small-scale firms, not to mention small-holders and peasants. There was certainly nothing in Chile's forest policy that gave incentives to small-holders, community forestry or reforestation, biodiversity preservation, and small-scale multiple use of forest habitats. Worse, the decline in the



economic value of the native forests, the volatility of markets, and titling problems meant that smallholders and peasants had a difficult time managing native forest harvests sustainably. Hence a strong incentive to change land use when the opportunity arose.

### **Policy Responses**

Given these biases, once Chile redemocratized, there was a national clamor for measures to reverse these trends and to stimulate the sustainable development of native forests and plantations in a way that included small-scale farmers and peasants in the fruits of the forest sector's bounty, and that protected the forest's biodiversity. Since assuming office in 1990, the two governments of the Concertación introduced two pieces of legislation designed to promote the sustainable development in the forest sector: the Native Forest Recovery and Development bill and Reform of DL 701. The former addresses the substitution problem via economic incentives (a tax on clear-cutting), offers fainthearted industrial policy for the subsector, and neglects the livelihood issue. By contrast, reforestation policy in the latter redirects an existing industrial policy toward the satisfaction of the basic needs of peasants and small-holders. Taken together, the bills reveal the absence of a national policy to move Chile's forest policy in the direction of the well-rounded, integrative model of sustainable development.

#### *The Native Forest Recovery and Development Bill*

The fact that the forest's present value is lower than that of alternative uses is one of the main reasons for the substitution of native forests for plantations and agriculture, or their wholesale destruction for wood chips (Vial, 1996a). Forest owners often legally or illegally choose those alternative courses to obtain an economic benefit from their property. The relative lack of economic value has several sources. Much of the substitution affects secondary growth forests whose trees have not yet reached harvestable dimensions. Many of the standing forests in areas easily accessible have already been highgraded—i.e., divested of commercial trees—and new growth is either not forthcoming or will take time to reach maturity. Moreover, the markets for native species suffer from great volatility in both price and quality, which makes doing business in native species a risky proposition (INFOR, 1991; Donoso and Bahamondes, 1994).

Given this framing, economic incentives for native forest management seemed an appropriate policy instrument to reduce the propensity to substitute native forests for other land uses. This proposition stands at the core of the Native Forest Recovery and Development Law, also known as the Native Forest Law. The idea is that these incentives will buy time to improve the commercial timber stock of native forests and create or stabilize markets for them (Rodrigo and Parson, 1995; Cavieres, 1993). This bill is so controversial that in the four years since it was introduced to Congress it has gone through a number of drafts, has yet to be approved, and may never pass Congress.

The government of Eduardo Frei, Jr. introduced the present incarnation of the bill, which dates from December 1995 (República de Chile, 1995a). Although the bill also details functions for the forest service, stipulates penalties for infractions, and establishes a forest research fund, tax and subsidy measures lie at its core. The bill relies almost exclusively on tax measures to protect native forests from destruction. Modelled on the "polluter pays" principle, landowners who wish to substitute native forests on their property with plantations, or other commercial activities, would be subject to a heavy tax, which the bill set at a sliding scale based on whether the forest had high productive value (60 monthly tax units), regular value (30 monthly tax units), or was a "degraded" forest (5 monthly tax units). Tax units are fixed inflation-adjusted measures whose value is posted in daily newspapers).

To stimulate the management of native forests, the bill provided direct subsidies. Forest owners who wished to manage their forests would be eligible to apply for a one-time lump sum payment of US\$400 per hectare one year after initial outlays. Moreover, eligibility for the program would be by competitive proposal writing, not entitlement or simple presentation of a forest management plan.

### *Reform of Decree Law 701*

Decree Law 701 of 1974 established sunset rules for its subsidies and tax breaks. These were to expire in 1994, although the sections on forest management were to remain in force indefinitely. As 1994 approached, the question became whether to let those subsidies and tax breaks die, to extend them, or to reform them. The Aylwin administration decided in favor of reform, and the Frei administration continued the effort.

As previously seen, DL 701 was immensely successful, but it mainly benefitted large-scale corporations. The Concertación, interested in redressing social inequalities exacerbated by the military government, decided to redirect the subsidies for forestation to small-scale farmers and peasants. They, too, should reap the benefits of harvesting from (small) plantations; after all, the markets were already well established. As a result, in the new bill large-scale owners were no longer eligible for subsidies and the tax breaks they had once received would be cancelled. By contrast, small-scale farmers and peasants needed the subsidies because they had no access to credit, many were relegated to poor soils, and they had few alternative economic options.<sup>8</sup>

The bill to reform DL 701 has several key features (República de Chile, 1995b). DL 701 contained no formal exclusion of medium and small-scale farmers or peasants. Its regulations did the job. Applicants had to present technical studies and management plans that peasants and smallholders could not finance. Moreover, they could not access the subsidies because the original decree only offered them on a reimbursement basis. The new bill waives the technical studies for smallholders (providing they accept management plans designed by the Corporación Nacional Forestal, or CONAF) and disburses payment in two tranches—one at the beginning and a second once it is clear that the seedlings have taken root. Subsidies would cover 75 to 90 percent of authorized expenses. However, as in the native forest bill, eligibility for the program would be on the basis of competitive proposals, not by entitlement or simple application.

### *Forest Policy Reform and Sustainable Development*

The fact that Chile introduced such strongly divergent legislation suggests the country does not yet have a national policy for the sustainable development of its forests; much less one that approaches the well-rounded, integrative model. Taken together, the bills reveal a bias towards large-scale industrial and market-friendly orientations to forestry, preferably plantations, with little interest in the sustainable development of native forests, by far the largest and most vulnerable of the two forestry subsectors in area covered, population, and number of sensitive ecosystems. Only the bill with the smaller reach—reform of DL 701—directly addresses the basic needs component of sustainable development. Neither bill, however, contemplates either multiple use of the forest or offers incentives for cooperative behavior. Moreover, funding for the incentive programs is low and controlled, which is the reason for allocating funds on the basis of competitive project proposals.

The lack of integration of the large-scale industrial and grassroots development components of the concept of sustainable development are starkest in the native forest bill. The native forest bill flatly ignores the issue of meeting the basic needs of forest dwellers. Multiple use of the forest, small-scale or otherwise, is not addressed either. Moreover, the bill discriminates against small-holders because the incentives are offered on a reimbursement basis, the stumbling block of the original DL 701. Instead, the bill advances large-scale industrial and market-friendly conceptualizations of native forest use and conservation. Industrial timber interests are in the best position to use the fiscal incentives to manage native forest stands on a sustained-yield basis, should any wish to do so. By the same token, and perhaps more tellingly, whether to preserve or use the forest is left entirely to the economic calculations of timber interests: the market value of managing the standing forest, preserving it, or converting to another land

use (plantation or agriculture). This formulation was calculated to allow timber interests ample freedom to substitute native forest for plantations, constrained only by profit and loss calculations.

Striking a balance between timber industry interests, small-holder needs, and adding economic value to the forest to conserve it has been the subject of constant struggle. Earlier incarnations of the native forest bill had been a little more accommodating to the livelihood question. The latest rendering less so. All versions have been the subject of fierce political conflict and it is very possible the bill will never emerge from the Congress.

By contrast, the bill to reform DL 701 is a significant improvement over the native forest bill in one important respect; it squarely addresses the livelihoods question. Unfortunately, its potential impact is more restricted because the area affected and the population reached is lower. For example, northern regions susceptible to desertification, and without very dense populations, are given priority. The budget earmarked is also much more limited than the subsidies that had been extended to the timber industry. The government paid industry for whatever it planted; the reform bill caps disbursements to peasants and small-holders. One potentially beneficial spillover for the native forest would be the eventual use of small-holder plantation timber for fuel wood. Interestingly, conflict over this bill has been far less intense than that over the native forest bill, and it is expected to pass.

In sum, approximating sustainable development in Chile's forest sector requires policies that provide for the forest's economic use with due respect for maintaining environmental quality, attention to social equity, and mechanisms for the participation and empowerment of citizens and communities—a tall order to be sure. Formulating such policy for *native forests* appears to be Chile's main stumbling block on the road to the forest sector's sustainable development. Fortunately, although less extensive in coverage, policies related to reforestation better integrate the key components of sustainable development and have better chances of passing.

### **The Politics of Forest Policy Reform**

The description of Chile's attempts to reform forest policy in the mold of sustainable development raises several questions. What factors explain Chile's difficulties in crafting forest policy reform more closely attuned to the well-rounded, integrated model of sustainable development? What conditions skewed the native forest bill was so overwhelmingly against promoting community forestry while the bill to reform DL 701 was more successful on that measure? Why was the native forest bill policy process so much more conflictive than reform of DL 701?

In Chile, international conditions were mainly background, permissive factors. International agencies were pushing sustainable development and that demanded some policy response, but none were directly involved in Chile's policymaking process. Therefore, the Chilean case offers an opportunity to examine the relatively unsullied impact of factors related to domestic structure. In both cases, cohesive teams of policy makers initiated the bills. But once the proposals were on the table, variation in degrees of support and opposition by social forces, their economic and institutional power resources, and their alliance patterns explain the differences between the native forest and the DL 701 reform bills.

What shape did those alliances take? The timber industry organized strong opposition by forging a coalition with the broader business community, parts of the nongovernmental organization community, conservative political parties, and some powerful ministries of state. They succeeded in radically changing the original native forest bill of 1992, which, contrary to the December 1995 bill, had at least dealt with the question of social equality. This coalition bested an alliance of policy makers in the ministry of agriculture and center-left political parties. By contrast, the timber industry felt less threatened by the DL 701 reform bill and did not ally with other actors to defeat it. Instead, it chose to negotiate over the points on which they disagreed. By the same token, at the margin, the absence of organized peasant participation in the native forest bill probably affected the decision to take a more

indirect approach to social equity questions; whereas participation by the organized peasantry influenced the design of the DL 701 in positive ways.

### *Conflict Over the Native Forest Recovery and Development Bill*

In Chile, the ideological background of the policy making team was instrumental in shaping the initial draft of the bill. The core of the policy making team had long advocated the sustainable development of native forests from a grassroots development point of view.<sup>9</sup> Their ideas matured during the period of military rule as they worked in opposition think tanks, nongovernmental organizations, and universities. Many had links to or were members of banned political parties. Thus, during the transition to democracy, they were called upon to serve on the technical team that put together the Concertación's campaign program for environmental issues.<sup>10</sup> With the victory of the center-left Concertación they obtained important positions for forest policy making under the wing of the Ministry of Agriculture (MAG), principally in the Corporación Nacional Forestal (CONAF). Most of the core members were from social-democratic political parties.

This team put together the core precepts of the native forest bill introduced to Congress in 1992 and approved by the House of Deputies with a few modifications in 1994 during the Aylwin administration (CONAF, 1992; Cámara de Diputados, 1993). While the original bill was far from ideal, it at least addressed the issue of building a native forest timber industry by adding value to timber from that subsector (industrial policy); it incorporated the basic needs question in the creation of that industry (thus acknowledging the social sector's fate to environmental quality); and it made a stab at land use planning. The most salient contrasts between this bill and the one the Frei administration gave to the Senate in December 1995 turned on the substitution issue and the subsidy formula.

The original bill had an entire section devoted to regulating substitution that is absent from the current bill (CONAF, 1992). A ban on substitution in national parks, forest reserves, watersheds, and habitat for endangered flora and fauna addressed biodiversity conservation concerns; as did a prohibition on clear-cutting—the basis for substitution—on slopes of over 30 degrees. To encourage the creation of a native forest timber industry, the CONAF proposed creating the category of manageable native forest, meaning native forests apt for sustained-yield harvesting. Moreover, a landowner's freedom to substitute native forests was restricted to no more 25 or 50 per cent of substantially degraded forests, those in which regeneration was unlikely.

The original bill adopted a second measure to promote an industrial policy for the native forest subsector. It copied the successful subsidy formula from DL 701, offering to pay 75 percent of the costs of managing sustained-yield harvests of native forests or, in the case of degraded forests, 75 percent of the costs of recovery. To facilitate access by smallholders and peasants to the subsidies, they would be made available on demand (CONAF, 1992). Although some of the framers of the native forest law would have wished to do more, the CONAF's original subsidy formula at least indirectly addressed the egalitarian component of sustainable development in the forested regions of rural Chile (Cavieres, 1993; Araya, 1993). By contrast, the current bill's subsidy formula calls into question whether the bill has a social objective, leaving a number of CONAF staffers either embittered or bewildered (República de Chile, 1995a).

The core CONAF team would have liked to address the basic needs component of the concept of sustainable development more directly. But the power realities of newly redemocratized Chile made it virtually impossible to pass legislation requiring funds for the type of extension services and community organizing small-holder development demands (Cavieres, 1993; Araya, 1993; Peña, 1996; Verscheure, 1996). First, both the Concertación and the conservative opposition (erstwhile supporters of the military government) agreed that rapid economic growth based on free-market economics could not be compromised, least of all by environmental concerns (Silva, 1996-1997, 1996). Second, to assure the stable macroeconomic conditions, the Concertación (through the Ministry of Finance) enforced tight

fiscal policy and strict probity in government expenditures (Marfán, 1993; Vial, 1993, 1996; Araya, 1993, 1996; Cabezas, 1993; Weber, 1993). This meant that funding was scarce for low priority issues such as the environment. Third, an "authoritarian enclave" inherited from the dictatorship (nine Senators designated by Pinochet) gave conservative forces control of the Senate, which had the power to veto all legislation (Loveman, 1991 and 1994). Fourth, given the military government's insistence on a "small state" and its labor repressive bias, the CONAF itself had not developed institutionally in a way that permitted it to carry out such tasks (Peña, 1996). As a result of these conditions, the core policy making team felt that a more indirect approach to grassroots development was the only politically feasible route.<sup>11</sup>

As soon as the initial draft of the bill was made public, conflict broke out. The subsequent struggle between the timber industry and CONAF/MAG revealed how an economically powerful timber industry may gain allies in the broader business community, conservative political parties, and other ministries of state to defeat bills with strong executive support. This ample coalition stalled the bill introduced in 1992 until the change of government from Aylwin to Frei (Vial, 1996b; Carrillo, 1996; Verscheure, 1996). The Frei government changed the focus of the bill to appease timber interests. Now the forces that supported the original bill block efforts to pass the new bill. The likely death of this bill will be a victory for the timber industry; the clauses from DL 701 will continue to apply.<sup>12</sup>

The conflict over the native forest bill nicely reveals how competing coalitions used economic capabilities and executive and legislative institutions as power resources. It developed over three stages of the policy process. In the first stage, the timber industry attempted to change the content of the bill before the executive presented it to Congress. It maneuvered to split the policy making team. To that end, it allied with the Forest Institute and pressured the head of CONAF, a Christian Democrat, to drastically relax conservation clauses and to alter the financial incentive structure. Given the timber industry's significant contribution to the Chilean economy, it obtained support from the Ministry of Economy to circumvent a moratorium on expansion and projects calling for more substitution of native forests were begun.<sup>13</sup> The head of the Ministry Secretary General of the Presidency (the president's chief political advisor) also sided with the timber industry (Zúñiga, 1993; Rodrigo, 1993).<sup>14</sup>

In the face of this opposition, relatively cohesive backing from the Aylwin administration for the core policy making team secured inclusion of the central grassroots development and conservationist points in the bill that the executive sent to Congress. That support took two forms. First, the unwavering public stance of the Minister of Agriculture was key; it provided the core team with the strength to insist on the retention of their initiatives.<sup>15</sup> Second, those postures garnered favorable intervention by President Aylwin. Aylwin replaced the head of CONAF, giving clear instructions to the new head not to capitulate to timber interests; instead, he should strive for a compromise. Instructions also went out to the Ministry of Economy to put the timber development project on hold.<sup>16</sup>

Defeated in its direct confrontation with the executive, the timber industry continued its struggle in the Congress. In its bid to defeat the bill in the House of Deputies, it gained support from the business community (in particular from the powerful manufacturers' association), conservative political parties, and environmental NGOs closely linked to the private sector.<sup>17</sup> Had it not been so strong economically, it is unlikely that these would have paid much attention to the timber industry. However, political parties belonging to the Concertación dominated Deputies, supported the executive's initiative, and approved the CONAF/MAG-sponsored bill with few modifications (Cavieres, 1991; Rodrigo, 1993; Cámara de Diputados, 1993). The bill then passed to the Senate, where the timber industry's coalition had the upper hand because conservative political dominated it and had absolute veto power over initiatives from Deputies. It remained blocked there until the end of the Aylwin administration (Vial, 1996b; Carrillo, 1996; Verscheure, 1996; Araya, 1996).

The timber industry coalition's success in blocking the native forest law in Congress was a major factor in the Frei administration's redrafting of the bill (Vial, 1996b; Carrillo, 1996). The new

administration made sure the policy making team was drawn from different sources: the undersecretaries of the ministries of finance, agriculture and secretary general of the presidency (El Mercurio, 1995; Estrategia, 1995).<sup>18</sup> In keeping with the Frei administration's more pro-business and fiscally conservative stance, this hand-picked, highly cohesive team, with a greater market-friendly outlook than the original CONAF team, sought to appease the timber industry and environmentalists (Verscheure, 1996; Vial, 1996a, 1996b; Carrillo, 1996). Because business interests and conservative political parties opposed the substitution clauses (in their eyes they impinged on constitutionally guaranteed private property rights) the new team edited those clauses out. In the interest of mollifying fiscal conservatives it narrowed access to fiscal incentives for forest management. Successful applicants would only receive a fixed sum, a one-time only payment in the form of a reimbursement for initial outlays. To soothe middle class urban conservationists they put a relatively high price on the substitution of healthy standing forests (Vial, 1996b; Carrillo, 1996).

This effort was tantamount to reopening the policy initiation phase of the policy process; and the small, tight, policy making team shaped the new bill without much input from other groups, whether from state or society. The bill has somewhat appeased the timber industry (Aburto, Rodrigo, and Urrutia, 1995). Although it claimed the bill was not in their interest because the price for substituting forest was too high (El Diario, 1996; Estrategia, 1996a, 1996b), the lobbying and media campaign have been far more muted than was the case with the previous bill (Araya, 1996; Weber, 1996). It is expected that the timber industry will successfully lobby to reduce the price for substitution (Vial, 1996b).

Conservationists, political parties, and social and state actors (CONAF and other agencies) interested in promoting national parks and grassroots development for native forest management are strongly opposed to the new bill (La Epoca, 1996a; Las Ultimas Noticias, 1996; La Nación, 1996; El Mercurio, 1996, Donoso, 1996). It is this coalition's turn to avail itself of legislative rules to deadlock the bill (La Epoca, 1996c). Legislative procedure demands a reconciliation bill be drafted by a committee of Deputies and the Senate, to be voted on in a joint session of Congress, when bills passed by the Senate are substantially different from bills approved by Deputies. It is believed that reconciliation between the two bills may not be possible.<sup>19</sup> In the meantime, the rules of DL 701 continue to be in force.

#### *The Policy Making Process and Reform of DL 701*

As had been the case with the Native Forest Recovery and Development bill, a cohesive team of policy makers in the state, with full backing from the president and the minister of agriculture, were responsible for policy initiation (El Mercurio, 1995; Estrategia, 1995). As previously mentioned, the Concertación was committed to redressing the most egregious social inequities produced by the military government. One of those had been the de facto exclusion of small-holders and peasants from the fiscal incentives of DL 701. The idea from the very beginning was to redirect subsidies to that sector (El Diario, 1995; Lagos, 1995b; Vial, 1996a, 1996b; Carrillo, 1996). Subsidies for the industrial plantations would be discontinued because it did not need them for further expansion. The industry was successful; the procedures, markets, and techniques were well-established; ample credit was available in private financial markets.

The institutions and nominal heads of the policy making team were the same as those in charge of the revision of the native forest bill (El Mercurio, 1995; Estrategia, 1995). But the staff charged with drawing up a bill was drawn from different agencies: mainly from the Ministry of Agriculture's Institute for Agrarian and Husbandry Development (INDAP) and some of the CONAF staffers involved in the original native forest bill (Díaz, 1996). INDAP was historically the MAG's agency for rural extension work; thus, it had experience and contacts with the organized peasant sector (Díaz 1996; Venegas, 1996; Aburto, Rodrigo, Urrutia, 1995; INDAP 1993, 1994). As a result of these connections, the Unitary Movement of Chilean Peasants and Peoples (MUCECH) was invited to participate in the initial policy formulation stage (MUCECH, 1995a, 1995b; Chile Ambiente, 1995). The MUCECH's participation was

also encouraged through the launching of a pilot reforestation program for small-holders managed by the CONAF and the INDAP (Díaz, 1996; Uriarte, 1996; Díaz, et. al., 1995). By all accounts, the MUCECH aided in the reformulation of many of the regulations that had prevented them from benefitting from the original DL 701 (Informe Comisión MUCECH/MINAGRI, 1994). In fact, the MUCECH was responsible for pointing out to the Ministry of Agriculture and the CONAF what those mechanisms were in the first place. The MUCECH's involvement in the process resulted in the extirpation of clauses that would have impeded small-holder participation, and generated clauses that aided the bill's grassroots development-friendly orientation (Díaz, 1996; Jofré, 1996).

The main reason this bill is expected to pass is the lack of strong opposition by the timber interests (Lagos, 1994a; Drouilly, 1994). Unlike the case with native forests, the timber industry was only mildly disgruntled rather than up in arms (Carrillo, 1996; Vial, 1996b). Consequently, it never sought to form larger coalitions to kill the bill. Instead it has worked with conservative political parties and the executive directly to negotiate two changes. One involved retention of some portion of the subsidies, which they are not likely to obtain. However, they have been more successful in extending tax exemption clauses, which had also been eliminated in the original bill (Carrillo, 1996). As a result the bill was quickly approved in Deputies and now awaits passage in the Senate, where stiff resistance is not expected (Lagos, 1994b; Chile Forestal 1996a; Diez, 1996).

A number of factors lay behind this relative quiescence. The main reason was that DL 701 had been a highly successful industrial policy. The firms in the affected sector were large and growing. By the 1990s, they had ample access to private credit, the markets they operated in were relatively stable, and the technology was well-established. Therefore, the commercial plantation timber industry did not require continued subsidies to be successful. They may still have been useful at the margin, but they were no longer crucial. As a result, bitter policy clashes were avoided. Moreover, because the bill only applied to denuded and marginal lands apt for reforestation, there was no conflict over control of a natural resource. Eventually, peasants and smallholders would probably sell their product to the large companies (Vial, 1996b; Carrillo, 1996, Díaz, Uriarte, 1996).

The fact that existing policy had resolved so many of the market questions meant that a number of thorny issues had already been decided: the policy's costs, assessment instruments, and the worth of the effort were known quantities. This made it much more difficult for timber interests to drive a wedge between different ministries and agencies. And that inhibited only mildly disgruntled private sector opponents from launching direct attacks against reform proposals.

By contrast, the native forest law involved drafting original legislation for an economic sector about which there was little hard information. The resource itself—the native forest—was of little perceived economic value. Markets, firms, and technology were volatile or primitive, and basic research on the quantities and quality of the resource were lacking. These conditions of uncertainty fed disagreement among government officials about the cost of the subsidies, where to draw the line on what to subsidize, or whether it was worth spending government funds for such a woefully underdeveloped economic sector in the first place. Moreover, the powerful plantation-based timber industry knew exactly what it wanted to do with the resource and was bitterly opposed to being regulated. It found allies in government and in the Senate to fight the bill, which, in their view, shackled their ability to dispose of the resource as they saw fit.

More at the margin, participation by the target social group in the formulation of the reformed DL 701 dampened the effectiveness of the timber industry's lobbying within the government. The MUCECH strenuously defended its recommendations from attacks by the Timber Corporation (CORMA, the timber industry's business association) both within the Ministry of Agriculture and in Congress (Jofré, 1996). By most accounts this contributed to relatively small rather than major degrees of backsliding, mainly with respect to redirecting subsidies away from industry to the peasant sector (Díaz, 1996, Jofré, 1996). By the same token, the absence of participation by the target social group in the

native forest bill probably contributed to the ease with which the Frei government reversed the spirit and letter of the bill.

There were a number of reasons for this lack of participation. To some extent, it was due to this social sector's lack of organization. At least in part, this was because timber from native forests, with the exception of wood chip production, was not perceived to be an economic resource. This meant that peasants and smallholders had little incentive to organize—there was too much risk and effort for uncertain results. Reforestation for plantations of exotic species, however, merited action because the returns were more tangible; thus, the MUCECH became interested. The fact that small-holders in native forest areas were neither smaller in number nor more dispersed than the social group that undertook reforestation further supports the economic argument. Moreover, the CONAF had little experience with the social sector that inhabits the native forests. Its institutional development during the military government brought it into much closer contact with the large-scale corporations of the commercial plantation industry. It was, therefore, a smaller step for the CONAF to work with peasants in reforestation, an activity it mastered (Jofré, 1996, Díaz, 1996; Peña, 1996).

The absence of representation for forest dwellers in the policy making process implied that, to some degree, the demand side for public policies with a social content for native forests was lacking. So were the information sharing and watchdog functions of such representation. This meant that the social equity and community empowerment components of sustainable development received less attention than they might have otherwise.

The fact that the native forest bill reflected the demands of the institutions that participated in its formulation reinforces this interpretation. Environmentalists, the CORMA, the CONAF, and various government agencies were quite active in the process. The CORMA saw the law as a struggle for control of a resource. Environmentalists opposed the CORMA. Increasingly, organizations interested in preservation dominated the representation of environmental groups in the conflict with the CORMA. As a result, the public debate over substitution became identified with preservation. Meanwhile, environmental organizations (the Comité de Defensa de la Fauna y Flora, CODEFF) and government agencies interested in the social question could not directly address social concerns. Eventually, a closed circle of policy makers from the Ministry of Finance, Agriculture, and the General Secretariat of the Presidency formulated the December 1995 version of the bill. Given the saliency of conservation and the marginalization of equity issues in the public debate, their tax formula mainly constituted a response to the environmentalists' concern for preservation and the CORMA's desire for less regulation. Equity concerns, to the extent that the CODEFF and the CONAF had managed to get them expressed in the original bill, basically were not addressed.

### **FOREST POLICY REFORM IN COSTA RICA**

For over a decade, Costa Rica has had commitment to the incorporation of policies and projects rooted in the grassroots development approach to sustainable forestry (Carriere, 1993 and Thrupp, 1993). Beginning in the mid-1980s the forest service encouraged community forestry, culminating in a 1990 bill for a new forest law that sought to deepen support for such measures. The forest service came under sharp attack for its efforts in a protracted, highly politicized struggle over the proposed legislation; the conflict blocked the bill in Congress, where it still languishes. In the final analysis, the grassroots development supporters suffered set backs, but were not defeated. A compromise bill with scaled-back grassroots development features became law in 1996.

#### **Costa Rica's Forest Sector**

Costa Rica enjoys an international reputation as a stable democratic nation committed to social equity and conservation. Historically, Costa Rica has suffered from high rates of deforestation. In 1900, 85 percent of the nation's territory was covered by tropical forests; that decreased to 56 per cent in 1950



and to 29 per cent in 1987 (Lutz et al., 1993). Of an estimated 1.5 million hectares of remaining primary forest, approximately 400,000 are not in protected areas and thus available for production. The Forest Service (Dirección General de Forestal, DGF) estimates that deforestation rates have decreased from an average of 50,000 hectares per year in the 1980s to 17,000 in the early 1990s (Kishor and Constantino, 1993).

Pressure on the forest has a number of origins. Traditionally, conversion to agricultural use or ranching has been a significant source of deforestation. These pressures have emanated from large-scale commercial farmers, agribusiness, and ranchers and from shifted cultivators taking advantage of land made available through the agrarian reform agency. In addition to these activities, logging has also contributed to deforestation. Interestingly enough, most of the logging has been legal, but high-grading is a problem. There is widespread concern over the effects of these high rates of deforestation on the preservation of Costa Rica's high diversity of flora and fauna, on watersheds, the quality of water, and soil erosion (Jones, 1992; Peuker, 1992; Carriere, 1993; Kishor and Constantino, 1993; Lutz, et al., 1993).

The forest industry is not a large component of the Costa Rican economy, and its firms are generally not large or equipped with up-to-date technology. Forest ownership is categorized in small (up to 50 hectares), medium (from 50 to 100 hectares), and large holdings (over 100 hectares). Small holdings include up to 50 hectares, medium from 50 to 100 hectares, and large from 100 up. In much of the industry land ownership, logging, and milling are not integrated. Many land owners, especially those with small and medium holdings based in family or individual ownership, contract logging gangs who arrange for transport to the saw mills. In some instances, larger-scale landowners (often corporations rather than individuals or families) may undertake logging themselves and even operate saw mills. According to available data, in 1985 the industry employed only 4,000 persons on a permanent basis and 10,000 seasonally. Meanwhile forest products accounted for only 4 per cent of total agricultural production value (one per cent of GDP) (MIRENEM, 1990a; Peuker, 1992; Lutz, et al., 1993). Exports were negligible in 1987 at US\$26.5 million (Stewart, 1992: 6). This represents no more than two per cent of the nation's exports.

### **Policy Responses**

Policy responses to these problems developed between the late 1980s and the early 1990s. At first, a number of incentive programs to spur sustainable use of the forest were initiated in the second half of the 1980s. These included subsidies (tax and credit) for sustained-yield forestry and for reforestation and plantation growing by large, medium, and small-scale enterprises (Kishor and Constantino, 1993: 3-4; Batchelder, 1993: 10-12; Peuker 1992: 13-20).

A second response centered on the formulation of the Costa Rican Tropical Forestry Action Program (TFAP) (MIRENEM, 1990a). The TFAP's diagnostic and policy prescriptions unambiguously favored the sustainable development of the forestry sector, with substantial attention to grassroots development efforts. The TFAP advocated sustained-yield forestry, emphasized fulfillment of the basic needs of forest dwellers, and improvement of the forest sector's contribution to the national economy. To achieve these goals the TFAP proposed land use planning (including set-asides for preservation) to delimit exploitable forest tracts; attention to watershed management; encouragement of sustained-yield logging; incentives for reforestation and plantations; promotion of technological upgrading, improved efficiency, greater integration, and improved marketing of the timber industry; emphasis on agroforestry and fuel-wood management for forest dwellers; development of buffer zones for national parks and other protected areas.

Many of these prescriptions stood at the core of the legislative initiative of the early 1990s that became Costa Rica's forest law in 1996. Initial drafts included significant incentives for grassroots development. They legislated fiscal incentives for small holders to sustainably extract timber from native

forests (what the Chileans wanted to do) and for reforestation with native species as well as exotics. Some incentives were already in place by decree. The novelty was that the bill established the Costa Rican state's responsibility in this area. The bill also had clauses that strengthened peasant organization so that cooperative efforts in community forestry and reforestation might be more successful. To ensure access to markets, it mandated the integration of their timber in industrial production. It essentially provided no incentives for plantations with exotic species or for large-scale industrial timber enterprises to exploit native forests; and heavily regulated the exploitation and transport of timber (Asamblea Nacional, 1992).

The bill that became law emerged in November 1994. Although it weakened the grassroots-oriented thrust of the original bill, grassroots-oriented forest development still retained a place (Dirección General Forestal, 1994). The new bill gave a greater role to the large-scale private sector in the policy process; it awarded a larger share of funds earmarked for the promotion of sustained-yield forestry to that private sector, including resources for plantations with exotic species; it eased up on regulation of transportation; and it dropped all reference to integration of the timber industry (in other words, an industrial policy for the forest sector would not be forthcoming) (Asamblea Nacional, 1992; MIRENEM, 1994).

### **The Politics of Forest Policy Reform**

The Costa Rican case offers two explanatory challenges. First, what accounts for the greater and more direct emphasis on grassroots development than was the case in Chile? Second, how could anti-grassroots development forces mount such a significant challenge? The crucial difference between Chile and Costa Rica on both questions was the presence of a strong international factor—the United States government on the side of market-friendly forces, and the presence of more social democratic European donor agencies that took grassroots development seriously.

As had been the case in Chile, the early stages of the policy process were shaped by the ideas of a relatively cohesive team of policy makers in the relevant political institutions. In Costa Rica, both the Ministry of Natural Renewable Resources, Energy, and Mines (MIRENEM) and the Legislative Assembly's Agricultural Commission shared policy formulation responsibilities in the forest issue area.<sup>20</sup> In the main, from mid 1990 to mid 1992, a cohesive group of experts in the forest service and the technical team of advisors to the legislative commission drafted initial forest bill, the one which in 1992 had a whole section devoted to strengthening existing grassroots development efforts.<sup>21</sup> This team placed high value on an industrial development policy for the forest sector, grassroots development initiatives, tighter government regulation of the private sector, and strengthening the forest agency—the *Dirección General Forestal* (DGF).

The general disposition of the policy making team to favor peasants and smallholders was an advantage for the advancement of grassroots development legislation. However, their stances and the greater grassroots development emphasis of the bill in comparison to Chile stemmed from two complementary sources. One was the contribution of an external factor: Holland's foreign aid agency, which had long supported more social democratic, grassroots development oriented approaches to sustainable development. It arranged for funds to finance an office of peasant development within the forest service—the Departamento Campesino Forestal (DECAFOR), which used the resources to fund reforestation and native forest management projects (Solis, 1993: 11). Second, DECAFOR's program, in turn, responded to demands from peasant organizations who felt that established incentives only benefitted the timber industry. Over time, the creation of DECAFOR and the incentive program for peasants strengthened the forest peasantry sector, both organizationally and economically, forming a social base for its efforts. In sum, an alliance between a more social-democratic European government aid agency, a peasant advocacy department in the Costa Rican government, and an organized forest

peasantry provided the base upon which to extend the grassroots development component of forest policy; although only the latter two were directly involved in drafting the new forest legislation.

Timber interests and their political and intellectual allies were outraged at the new forest bill. But since they were economically weak, especially in comparison to their Chilean counterparts, what could they do to stop it? For the most part, their firms were not highly capitalized, or technologically sophisticated, and they were not connected to Costa Rican conglomerates. Moreover, by and large, the industrialists did not own the forests. They were almost entirely in the hands of small-holders and peasants. This was why the timber industrialists did not, by and large, log the forests directly; they contracted with mobile logging teams for the supply of raw materials. As a result of their economic weakness and disarticulation, timber interests found it difficult to enlist help from other business sectors to lobby higher instances of government.<sup>22</sup>

The Costa Rican proponents of a market-oriented approach to sustainable development found two supports. First, within the executive branch the grassroots development oriented forces were not quite as strong as they had been in Chile. In Costa Rica, cohesiveness around such initiatives was laxer—meaning that significant factions within the executive were uncomfortable with the emphasis on grassroots development—but as will be seen, this situation was not decisive.

The socially progressive versions of native forest legislation had begun their life under the more social democratic Partido Liberal administration of Oscar Arias (1986-90) (República de Costa Rica, 1986; and Ministerio de Recursos Naturales, Energía y Minas, 1990: pp. 43-7). During the more conservative administration of Rafael Calderón (1990-94) a constitutional challenge to the law opened it up for debate once again (Mendoza, 1990). The new administration replaced ministers and top political appointees in the environmental agencies, but the main technical teams remained basically unchanged due to civil service clauses and political maneuvering. Moreover, during this struggle, the locus for policy formulation passed to the Assembly, which was mostly sympathetic to the advisory team's position. Under these circumstances, the new minister of environment could not override the bill even though he opposed it.<sup>23</sup> As a result, although in formal terms the cohesiveness of executive backing for the grassroots effort was not as strong as in Chile and Venezuela, it was not the deciding factor in the outcome.

What prevented this bill from passing in 1990-1991? Another external factor, the direct intervention of the United States Agency for International Development (USAID), made the crucial difference in Costa Rica. The head of the rural development department strongly advocated market-oriented policies, and was an admirer of the Chilean timber industry. Thus, the minister of natural resources and the private sector turned to him for help against the grassroots-oriented policy making team in the ministry and the legislature. USAID provided the resources and organizational know-how to, first, contract a market-oriented environmental think tank to develop a counter bill, and second, to improve private sector organization by pulling together the different subsector groups under the umbrella of a single organization—the Cámara Costarricense Forestal—to lobby bureaucrats and the Assembly.<sup>24</sup> The strategy worked. In highly politicized, but not public, political maneuvering they blocked the original bill, which was quite advanced in the legislative process. According to private sector representatives, without help from USAID it was unlikely that weak timber industrialists and relatively weak pro-market government actors would have had the power to resist a more grassroots-oriented bill.<sup>25</sup>

The compromise bill that emerged in November 1994, presented much stronger market-oriented elements than the original one. But grassroots-oriented forest development still retained a place, which differentiates Costa Rica from both Chile and Mexico Dirección General Forestal (1994). For in the face of entrenched political groups that favored grassroots development in the state, which were supported by more social democratic European government sources, the economic and political weakness of timber industrialists forced them to ally with small and medium scale farmers. Both had an interest in the liberalization of state controls over logging.<sup>26</sup> As a condition of their participation, the small and

medium land owners and peasants negotiated favorable clauses for their development with both large-scale timber interests and their allies within the forest service.<sup>27</sup> In short, U.S. intervention on behalf of market-friendly forces significantly bolstered them. However, those forces were still not powerful enough for complete victory because of resistance from an organized peasantry that had allies within the state and from external sources. This was the bill that became law with minimum alterations in 1996.

## CONCLUSION

This paper analyzed when and how ideas, state institutions, social groups, and external factors affected recent forest policy—expressed in legislation and decrees—of Chile and Costa Rica. The focus was on how the relationship between these clusters of variables affected the degree to which recent forest legislation incorporated stimuli for the grassroots development component of the concept of sustainable development. In terms of outcomes, Chile's legislative framework exhibits a weaker commitment to the grassroots development component of sustainable development than Costa Rica. Its largest forest subsector—the native forests—essentially does not address the issue; the smaller subsector does, but in a more limited manner than need be. Costa Rica had much a more direct and diverse approach to the problem that covered both native forests and plantations.

In terms of explanation, Chile offered a window into the politics of sustainable forest policy in democracies where international factors were not directly involved. Newly democratic Chile showed that the ideas of the core policy making team can be key to understanding the initial policy formulation, which emphasized native forest management and grassroots concerns. At a deeper level, the case exemplified the politics of forest policy when industrial, plantation-based timber interests are powerful social actors. When timber is a key export product, and when the companies are part of a country's leading conglomerates, they can gain support from other ministries and government agencies to change the content of bills they find offensive. Under these circumstances, the policymaking team must have more solid state institutional backing in the form of strong support from their minister, and perhaps of the presidency itself, or else their proposals will be vetoed before the bill is ever presented to the legislature. If the bill makes it to the Congress, economically powerful and important social actors may enlist the help of conservative parties to defeat the executive's bill—the legislature's institutional powers and the political strength of conservative parties permitting. This bloc's task will be made easier to the extent that the executive lacks an organized social constituency for its bill, in this case the peasantry, Native American nations, or small scale farmers.

The dynamics of the bill to reform DL 701 in Chile nicely contrasts these points. The policy making team and the state institutional backing for this bill were roughly the same, highlighting the significance of society-centric factors. The main difference with the native forest bill was that the powerful timber industry did not oppose the bill. Moreover, the case shows that a stronger connection between the policy makers and organized grassroots social groups helps the policy process in two ways. First, information from the target group aids in insuring that proposed policy can achieve the desired goals. Second, the alliance can defend more strongly against reverses in policy orientation when opposition arises.

Where international factors play a more direct role they augment the power resources of domestic actors, both state and social.<sup>28</sup> Democratic Costa Rica suggests how complicated those relationships can be when proposed forest policy has a strong grassroots development component to it; when both U.S. and social-democratic European countries are involved; when timber interests are not strong; and when peasants and farmers are organized. The case demonstrates that policy making teams that combine ideals of social justice with environmental concerns can infuse the first drafts of forest policy with a well-defined grassroots development orientation. Their position tends to be strongest when backed by their ministry; when they serve an organized peasant and farmer constituency; and when social-democratic European countries offer financial assistance. Under these conditions, weak timber

interests must search for allies or lose ground to initiatives that favor peasants. They may find them in the form of a minister who does not support the policy recommendations of subordinate agencies. If this happens, the policymaking team will need the backing of higher level political actors (in this case the legislature) or else the bill will be killed. But, even when such backing is available, direct intervention on behalf of market-friendly forces by the regional hegemon—the United States—can deflect the outcome by offering financing for the drafting of alternative bills; by organizing timber interests; by coordinating the efforts of opponents of the grassroots development friendly bill. The final bill, in a conflict where both sides have access to domestic institutional and external power resources, may be a compromise, with the grassroots development component diluted but not expunged.

## NOTES

1. Of course, policy consensus along these lines does not preclude widespread disagreement in academic and NGO circles over the usefulness of the concept of sustainable development, what should be sustained, how it should be sustained, and whether anything can be sustained. For a representative sample see Daly and Townsend, eds. (1993).

2. A more civil-society centered strand of the grassroots development approach advocates a heavier emphasis on the nexus between NGOs and organized communities; and it argues against deeper involvement of state institutions.

3. A wide range of techniques, or approaches to the use of forest resources, exists, although non advocate clear-cutting. Some are closely modeled on sustained-yield techniques. The primary interest continues to be extraction of maximum cubic meters possible without affecting regeneration. Species are inventoried and rotation plans are plotted. Extraction often involves the use of skids or tractors. Regeneration may be natural or with the planting of seedlings. Other approaches are more sensitive to mimicking natural processes. For example, the size of a cleared area may imitate that of a natural tree fall with natural regeneration (Hartshorn, 1989).

4. For "situation" as an analytic concept see Gourevitch (1986).

5. For an excellent case study of these dynamics see Schmink and Wood (1992).

6. In 1994, the forest sector employed about 95,000 people (two percent of the economically active population), 60 percent in industry and services and 40 percent in silviculture and extraction (INFOR, 1995).

7. For a dissenting view see Gómez (1993).

8. All persons interviewed by the author in July 1996 coincided on this point.

9. For the articulation of the grassroots development approach to the sustainable development of forests see Cavieres, et al. (1986), Otero (1985), Schmidt and Lara (1985), Lara (1985), Lara, et al. (1989).

10. Among others, the forestry subcommission of the Concertación campaign included Aarón Cavieres, Jaime Tohá, Juan Moya, Luis Otero, Fernando Bascul, Jorge Catemillán, and Ignacio Leighton. For the Concertación's platform see Lara, Cavieres, Cortés, and Donoso (1989).

11. Swenson (1997) gives a more theoretical treatment of how anticipation of opposition affects the policy proposals of state actors who are progressive reformists.
12. A number of interviewees stated that many sectors of the environmental movement now preferred this outcome, believing the original DL 701 measures (which they originally opposed) to be more benign than the new bill (Verscheure, 1996; Vial, 1996; Carrillo, 1996).
13. These events were triggered by the Terranova case, where the Ministry of Economy gave the green light to a forestry project against the wishes of CONAF and the Ministry of Agriculture. For the Terranova case see Asenjo (1992), Partido por la Democracia, Comité Forestal (1990), CODEFF (1990), La Epoca (1991).
14. For more details on the opposition to the MAG/CONAF position see Silva (1997).
15. For Minister Figueroa's stance see Estrategia (1991), El Mercurio (1991).
16. With respect to President Aylwin's position, a number of interviewees in the policy making loop mentioned the importance of his intervention. Some interviewees stated that the environmentalist views of President Aylwin's son played an important role in the president's decision. Author interviews in Santiago de Chile, June-July 1992 and August 1993. (Weber, 1993) reported that Aarón Cavieres of CONAF basically wrote the speech in which President Aylwin made his position in favor of the native forest bill clear.
17. The set of shared interests that made this alliance possible are articulated in the public policy debates, see Infante (1991) and CIPMA (1992); also author interviews with Vial (1996), Carrillo (1996).
18. The undersecretary of finance, Manuel Marfán (1993), was a former academic from CIEPLAN, thus, Joaquín Vial (1996a, 1996b) of CIEPLAN (a think tank connected to the Concertación) contributed the economic incentive portion of the new law; Eduardo Carrillo (1996). Both were interviewed by the author.
19. For examples of the gulf between the two see Raga (1995), Lara (1996), and CORMA (1994).
20. The institutional setting for legislation in Costa Rica is complex, and, for idiosyncratic reasons that cannot be developed here for lack of space, even more so in the case of natural forest policy. For the basics see Carriere (1991).
21. For the policy orientation of the legislative commission I relied on author interviews with key actors in the process, these included José Luis Salas, technical director of the commission; Gilbert Canet, director of the Forest Service's Office of Peasant Development; Gastón Vargas, chief aide to Legislative Commission. All interviewed in San José, Costa Rica, Nov. 1994 and Feb. 1995.
22. These data from author interviews with key market-friendly participants, Enrique Barrau, Agricultural Development Officer, USAID; Raúl Solórzano, Executive Director of the Centro Científico Tropical; Luis Fernando Sage, forest industrialist; Alfredo Peralta, forest industrialist; all interviews in May 1993 and Nov. 1994, San José, Costa Rica.

23. These data collected during author interviews with key actors on both sides of the debate. On the more grassroots-oriented side these included José Luis Salas, technical director of the commission; Gastón Vargas, chief aide to Legislative Commission. All interviews in San José, Costa Rica, Nov. 1994. On the more market-friendly side interviewees included, Enrique Barrau, Agricultural Development Officer, USAID; Raúl Solórzano, Executive Director of the Centro Científico Tropical; Luis Fernando Sage, forest industrialist; Alfredo Peralta, forest industrialist; all interviews in May 1993 and Nov. 1994, San José, Costa Rica.

24. In addition to the author interviews from the previous note see Centro Científico Tropical (1992) and Unión Nacional de Empresarios Forestales (1993). For lobbying efforts see National Assembly (1994).

25. Author interviews with Luis Fernando Sage, forest industrialist; Alfredo Peralta, forest industrialist, and now vice president of the Cámara Costaricense Forestal; Edgar Salazar, executive director, Comisión de Desarrollo Forestal de San Carlos. All interviews in May 1993 and Nov. 1994 in San José and Ciudad Quesada, Costa Rica

26. Author interviews with key large and small-scale private sector timber interests and peasant organizations, Luis Fernando Sage; Alfredo Peralta; Edgar Salazar; Magda Solís, executive director of the Junta Nacional Forestal Campesina. All interviewed in May 1993, Nov. 1994, and Feb. 1995 in San José and Ciudad Quesada, Costa Rica.

27. Author interview with Magda Solís, Junaforca, Nov. 1994. Junaforca carried out the negotiations on behalf of peasant organizations. Also see Junaforca (1994).

28. For a complementary view see Hurrell and Kingsbury (1992: 1-47).

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