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LESSONS ON SUSTAINABLE DEVELOPMENT FROM COSTA RICA'S FORESTS

Eduardo Silva

Costa Rica's innovative efforts to implement a policy of sustainable development raise a number of questions. What trade-offs have the forest and biodiversity conservation policies of the 1990s generated with respect to the different components of sustainable development? Are the measures adopted likely to be successful? How were those policy choices made? By what means can the components of sustainable development that have been neglected be incorporated, especially those related to livelihood? This paper addresses these questions by analyzing Costa Rican forest policy, one of that nation's most sharply contested environmental issue areas.

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LESSONS ON SUSTAINABLE DEVELOPMENT FROM COSTA RICA'S FORESTS

Eduardo Silva

Costa Rica enjoys a reputation as a peaceful, democratic, and equitable Central American country with a strong commitment to nature protection. Government environmentalism began with a focus on nature preservation during the administration of Daniel Odúber (1974-1978), the presidential father of the national parks system. Under President Oscar Arias (1986-1990), Costa Rica's leaders became aware that responses to the problems of environmental protection versus development required more than the creation of national parks. Since then, they have worked tirelessly to weave the norms and principles of the concept of sustainable development into their nation's policies and institutional framework. Costa Rica's institutional and programmatic innovations have turned it into a laboratory for sustainable development, especially with respect to the forest. It is seen as a leader and pioneer in community forestry, bioprospecting, green taxes, carbon emissions trading, and administrative decentralization in the management of protected areas. As occurs with all trailblazers, Costa Rica's efforts to implement a policy of sustainable development raise a number of questions. What trade-offs have the forest and biodiversity conservation policies of the 1990s generated with respect to the different components of sustainable development? Are the measures adopted likely to be successful? How were those policy choices made? By what means can the components of sustainable development that have been neglected be incorporated, especially those related to livelihood? This paper will address these questions.

Sustainable Development

Since the 1980s, sustainable development has evolved into a complex, multifaceted concept that seeks to balance economic growth, environmental protection, social equity, and citizen partic-

ipation in decisionmaking (WCED 1987; World Bank 1992). Economic growth is necessary for political stability and for raising standards of living, which, in developing countries, means poverty reduction. Poverty alleviation is thought to have positive effects on the environment because poor people put great strains on natural resources, pasture, water, and forests. Yet economic growth alone will not suffice to restore environmental quality or to cover the livelihood concerns of impoverished people.

With respect to environmental quality, the consequences of economic growth (health hazards of pollution, climate change, biodiversity loss, and resource scarcity) can no longer be ignored by treating them as externalities. The costs of those consequences must be incorporated into economic decisionmaking. Where natural renewable resources are concerned, environmental economists have cultivated the concept of sustained-yield use (Pearce and Turner 1990). This means that a resource's rate of extraction (fisheries, timber, or game, for example) should not exceed its rate of replacement. The minimum goal is to keep stocks of resources constant; ideally, they would also increase over time, adding to a country's capital stock.

Neither economic growth nor sustained-yield use of natural resources adequately addresses the issues of combating poverty and bringing about social equity. These tasks require the empowerment of local, usually poor communities (Redclift 1992; Friedmann and Rangan 1993). This is one of the reasons why citizen participation has become a crucial component of sustainable development. Citizen participation in decisionmaking (democracy, in a word) is a key element in the process. However, participation in the policy process is not a sufficient condition for the improvement of livelihood. Other factors include institutions, organizations, and funds in the state

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and in civil society that support social organization, community control over economic resources, and the generation of community enterprises. Without such support it is unlikely that the efforts of local communities will succeed in improving the supply of employment, education, health, and other social services to the community. The asymmetries of knowledge and of economic and political power between poor communities and other sectors of society are simply too great to expect otherwise. Of course, in the context of sustainable development, the economic activities of local communities must incorporate mechanisms to conserve local environmental resources. Some analysts believe that, if properly planned, smaller-scale use and less capital-intensive technology allow economic development to be more sensitive to the nuances of local ecosystems. In the forest sector, this approach is called community or social forestry (Browder 1989).

Nature protection and ecosystem management have become increasingly important components of sustainable development, especially after the signing of the biodiversity convention at the Rio Earth Summit in 1992. Environmentalists stress that ecosystems perform numerous environmental services. Forests, for example, help to control greenhouse gases by capturing and storing CO₂; they are crucial for watershed stability, constrain soil erosion, and provide habitat for flora and fauna. These environmental functions also have value, though they may be difficult to quantify. Thoughtlessly destroying them may adversely affect human health and welfare, for natural systems protect us, and the maintenance of biodiversity is crucial to ensure the well-being of future generations.

Moreover, growing awareness exists — especially in developing countries — that parks isolated from people do not provide a workable solution for biodiversity conservation. The livelihood needs of rural populations put pressure on parks. Thus, conservationists are beginning to emphasize land-use planning around protected areas in which mixed-use zones surrounding parks buffer core areas from further encroachment. The incorporation of local people into park management dovetails with the goals of meeting basic needs and community participation in sustainable development.

Any country would be hard-pressed to address all of the elements of sustainable development simultaneously, all the more so for developing

countries. Giving priority to some elements over others implies trade-offs. For example, an emphasis on urban areas usually means neglect of rural regions. A focus on market-led economic growth at the global and domestic levels, combined with an emphasis on sustained-yield resource use,¹ frequently signify postponement of community development and participation in favor of large-scale industry; these priorities also tend to call for technocratic instead of participatory approaches to policymaking. A preference for biodiversity protection often means abandonment of sustained-yield harvesting of natural renewable resources, either industrially or, especially, by local populations. To complicate matters, cutting across the policy debates over these trade-offs are two deeper, “classical” policy issues: 1) the role of the state in the economy and society and 2) (re)distributive concerns or the “who benefits” question.

Yet, these trade-offs are not inevitable. It is possible to craft policy that is more inclusive of seemingly competing goals. However, a focus on traditional policy analysis — description of the problem and prescriptions for corrections — may not suffice. Clarifying policy options and the technical rationales for them are important steps. But the environment and sustainable development in particular are new issue areas. Therefore, they are the subject of contentious politics, the politics of reform and change (Tarrow 1994, 1996). Conflict and cooperation among major stakeholders deeply influence policy outcomes; therefore, reformers interested in a more inclusive approach to sustainable development would benefit from knowing the major stakeholders, their interests, and their sources of influence. This information would place reformers in a better position to cast policy prescriptions for incremental change in ways that bring diverse interests together. Understanding the political opportunity structure that affects environmental policymaking in Costa Rica reveals that prescriptions for improvement — implementing a more integrated version of sustainable development — do not require political sea changes. They can be acted upon within the existing structure.

To answer the questions raised at the beginning of this paper, the first section examines government environmentalism prior to the 1990s, introducing the main stakeholders. The next two sections focus on the contributions and limitations of current policy for the sustainable development of Costa Rica's forests. The concluding sections analyze the policy process that generated those

policies and explore the potential for a more inclusive approach to sustainable development.

Costa Rican Forest Policy: Setting the Stage

Three major tendencies have shaped Costa Rica's forest policy. One champions conservation either as strict preservation or as a search for economic uses of the forest that support preservation, mainly in the form of protected areas. The second and third tendencies focus on the economic uses for the forest's timber and non-timber products as tools to promote incentives for the sustainable development of the forest inside and outside of protected areas. The differences between the second and third approaches depend on the characteristics of the producer and the producer's relationship to the market. Tendency two mainly draws its inspiration from economic liberalism, focusing on landowners (mostly large-scale) and other actors, each connected to the market individually. Tendency three has more communitarian roots, focusing on cooperative behavior — building social capital — among peasants and small-scale farmers as a prerequisite for more successful participation in the market. The following sections show how, over time, Costa Rican and international stakeholders with philosophies and interests anchored in these three tendencies have shaped Costa Rican forest policy. At present, the differences among them remain unreconciled. How to achieve reconciliation in the context of a still fairly poor country remains a question.

Conservation

Historically, Costa Rica has suffered from high rates of deforestation, a testament to the unsustainable nature of the forest sector's development. In 1900, 85 percent of the nation's territory was covered by tropical forests; that decreased to 56 percent in 1950 and to 29 percent 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, thus are available for production (Kishor and Constantino 1993). The Forest Service (Dirección General de Forestal — DGF) estimated that deforestation rates decreased from an average of 50,000 hectares per year in the 1980s to 17,000 in the early 1990s. In a hotly debated study released in 1998, the Ministry of Environment and Energy (Ministerio de Ambiente

y Energía — MINAE) proudly announced that deforestation had been halted. The calculation was based on a controversial definition of secondary forest as forests that regenerate naturally.

Costa Rica's forests have succumbed to many sources (Carriere 1991; Peucker 1992; Hopkins 1995). Conversion to agriculture and ranching by large-scale commercial farmers, agribusiness, and ranchers have been significant sources of deforestation. Government subsidies to expand cotton, sugar, and meat production for export spurred them on. Shifted cultivators² also contributed to deforestation by settling on heavily forested parcels of land made available through the agrarian reform agency. Legal and illegal logging destined primarily for domestic markets, of course, have been a perennial source deforestation. Moreover, legal logging practices condoned high-grading,³ which degrades the market value of the forest.

Since the 1950s, concern in Costa Rica has steadily mounted over the effects of these high rates of deforestation on the country's efforts to preserve its diverse flora and fauna, and abundant watersheds and to prevent soil erosion. Early responses focused on the control of timber production and habitat preservation (Hopkins 1995). A forest service had existed in Costa Rica since 1948. However, the 1969 forest law, which created the DGF, greatly strengthened the institutional framework for Costa Rica's forest sector (Asamblea Nacional 1969). Originally housed in the Ministry of Agriculture, the DGF had two departments: National Parks and Forest Protection. The DGF's functions were to control timber extraction and land-use change on public property. It also regulated timber extraction on private property but only when landowners wanted to avail themselves of concessions to public lands or use public subsidies for agricultural development. Otherwise, private property owners could dispose of their forests as they saw fit, which they did, and deforestation continued at a rapid pace.

As the forests dwindled, government environmentalism began to focus on nature preservation during the administration of President Daniel Odúber (Hopkins 1995). Odúber turned the National Park Service into a General Directorate, thereby establishing it as an independent agency on equal footing with the DGF. He also sponsored the creation of a national parks system. His efforts earned him international recognition and put Costa Rica on the environmental map. The

emphasis on nature preservation continued during the presidency of Rodrigo Carazo (1978-1982), who took an active interest in the parks system and had a personal role in the establishment of Parque Amistad, an innovative bi-national park overlapping the borders of Costa Rica and Panama.

The contributions of these political leaders notwithstanding, at bottom, the parks system was the creation of Costa Rica's pioneering environmentalists. These individuals formed a community of knowledge rooted in a scientific background, a common vision, and shared experiences, often dating from university student days. They persuaded successive presidents that parks were the best way to protect the environment. Their influence, in no small measure, stemmed from the fact that they formed a cross-party coalition on behalf of environmental protection (Boza 1997). This tightly knit community of knowledge and its followers steadfastly championed conservation over use in policy debates. They have placed Costa Rica in the forefront of the biodiversity movement in the developing world and, among other achievements, have played a leading role in getting environmental education into the curricula. This community of knowledge continues to exercise a powerful force for conservation in Costa Rica today.

Introducing Sustainable Development

Of course, parks and reserves were just the beginning. The harder challenge had to do not only with how to manage the parks but also the wise use of the environment, especially throughout the country. Continuing high rates of deforestation and the emergence of the concept of sustainable development in the 1980s underscored the shortcomings of Costa Rica's initial policy and institutional responses to unrestrained land-use change. The Forest Service's domain and focus were too narrow. Advocates of sustainable development stressed that environmental problems cut across economic sectors. Yet, the DGF had little control over privately held forests, colonization policy, or the expansion of the agricultural frontier. Moreover, its focus on timber production meant that the DGF had little concept of forests as ecosystems and the value of their environmental services and non-timber products. The Park Service's exclusive focus on preservation necessarily entailed a lack of attention to the relationship between human pressure over natural resources

(especially by rural poor) and habitat protection. Awareness of these deficiencies sparked over a decade's worth of legislative and administrative efforts to reform these institutions and their policies to try to implement sustainable development in Costa Rica.

The administration of Oscar Árias opened political opportunities for policymakers captivated by the concept of sustainable development (many of them had been closely connected to the United Nations or other development aid institutions, usually as consultants). Backed by the president, whose party, National Liberation (Liberación Nacional), enjoyed a majority in the legislature, these policymakers and their supporters generated a number of institutional, administrative, and legislative reforms. First, they conceived a program, Conservation Strategy for Sustainable Development (Estrategia de Conservación para el Desarrollo Sostenible — ECODES), that squarely placed Costa Rica's environmental policy in the context of sustainable development (MIRENEM 1990). With legislative approval, they created the Ministry of Natural Resources, Energy, and Mines (Ministerio de Recursos Naturales, Energía y Minas — MIRENEM) in 1987 (Segura, Gottfried, Miranda, and Gómez 1997). It housed the Forest Service, the Park Service, and the Wildlife Service. The ministry's cabinet-level rank revealed the Árias administration's will to imbue natural resource-related environmental issues with a modicum of political authority. Separating the various services from the Ministry of Agriculture and adding the energy and mining sectors also signaled an aspiration to confront the intersectoral and development-related dimensions of environmental problems.

This arrangement entailed two omissions that caused serious difficulties. First, there was no coordination of environmental problems at the ministerial level. This inhibited more serious attention to the crosscutting and intersectoral nature of the issue area. Second, the MIRENEM minister had limited control over the various services. Each had its own law that had not been abrogated, giving them independent powers. Thus, to varying degrees, the minister's role was reduced to that of a coordinating agent among rival services. This adversely affected administrative efficiency, policy formulation, and policy implementation. Both omissions reflected political concerns: an attempt to create a coordinating institution or to abolish the independence of the services would have

been too politically costly or unattainable. Moreover, policymakers lacked a vision of how to integrate the functions of the various independent services.

Despite these shortcomings, Costa Rica was a cauldron of experimentation in the 1980s. Because the nation was in the grip of economic stabilization programs, much of that experimentation relied on international funding. Those sources championed pilot projects in sustainable, participatory community forestry and reforestation for timber and fuel wood; and they also provided resources for wildlife and protected area management.

Reliance on foreign funding had other benefits as well. Many projects trained Costa Ricans in the concepts, techniques, and administration of community forestry and reforestation. Another benefit was that the environmental and socioeconomic problems of regions that had suffered after the collapse of cotton, sugar, beef, and banana markets were finally being addressed, most notably in the peninsulas of Guanacaste and Osa (E. Rodríguez 1997). Buffer zone projects for the people surrounding parks, especially in central Costa Rica, sensitized Parks Service personnel to the connection between preservation and development. Finally, the participatory nature of the projects nurtured a grassroots leadership for the community-based non-governmental organizations (NGOs) created by them (Solís 1993).

Dependency on foreign financing had its disadvantages too. Policy coordination was problematic. The country was more or less carved up into areas of influence for each of the major donors (often the development aid agencies of European governments and the United States) and their Costa Rican allies. Of course, the fate of the projects when the foreign funding ended was the most serious problem. Although Costa Ricans participated in the design of international projects, the funding priorities of international donors affected the Costa Ricans' proposal submittals. As trends changed among international donors, internationally funded, established projects faced grave difficulties. Since many experiments found it difficult to become self-sustaining, extinction threatened as soon as the official, internationally backed project ended.

Institutional and legislative reforms followed apace with the new focus on sustainable development. The DGF expanded its regulatory mandate to private as well as public forests and over the

transport of timber. Economic incentives for reforestation were adopted on the assumption that people care for resources they value. Because they were initially on a reimbursement basis, tax credits and subsidies mainly benefited a few relatively large companies and landowners (Segura, Gottfried, Miranda, and Gómez 1997).

All of these measures were legally enshrined in the forestry law of 1986, with more reforms added over the next two years (Asamblea Nacional 1986). By disbursing funds in advance, a reforestation incentive program for smallholders was established with the help of the Dutch and Swedish governments (Solís 1993). The Dutch made funding conditional on the establishment of a Department of Peasant Forestry (Departamento Campesino Forestal — DECAFOR), thus ensuring that smallholders received an institutional toehold in the DGF. In effect, DECAFOR became the nexus between grassroots NGOs and the DGF/MIRENEM (Canet 1995). These measures enhanced the socioeconomic development, that is, the satisfaction of basic needs, and the participatory dimensions of the concept of sustainable development in Costa Rican forest policy.

Meanwhile, the Park Service designed its first plan for a National System of Protected Areas (Sistema Nacional de Áreas Protegidas — SINAC), which melded ideas from the United Nations' Man-In-Biosphere program with those of sustainable development. The project advocated strict preservation of an ecosystem's core area, allowing for small-scale land use in buffer zones around it to prevent encroachment by local communities. Proponents assumed that, perceiving a benefit, local populations would protect the core area and buffer zones from encroachment by more distant communities.

These policy choices evinced trade-offs that contained the seeds of sharp political conflict. First, they emphasized government regulation of the private sector by the DGF over market incentives. Second, the participatory component focused more on smallholders and their organizational development than on large-scale landowners; however, the government (via the DGF) dominated over the organizations of civil society on policy-making and funding boards. Third, the policies emphasized reforestation over the management of old-growth or native forests. Fourth, the focus remained on timber production and preservation instead of incorporating ideals of nontimber use and valuation of the environmental services

performed by the forest. Fifth, the measures privileged a participatory approach to sustainable development, centered on direct and indirect subsidies rather than a more technocratic and market-oriented style.

Reorienting Institutions and Programs, 1990-2000

Attempts to consolidate this approach to the sustainable development of Costa Rica's forests through a reform of the 1986 Forest Law met with stiff resistance in the 1990s. When the dust settled in 1996, Costa Rica's Ministry of the Environment had been thoroughly reorganized, and policy for the sustainable development of the forest bore little resemblance to the 1980s. By the year 2000, conservationists had regained the upper hand; timber interests struggled to retain state incentives, and community forestry all but lost its tenuous foothold in the state and in forest legislation.

The Politics of Containment

Toward the end of the Árias administration, the DGF presented the Congress with a new forest law. It was essentially the same as the 1986 law with the addition of clauses meant to give more permanence to the regulatory, participatory, and incentive-oriented direction of policy as it had evolved between 1986 and 1988. A constitutional challenge to the 1986 law at the beginning of the conservative Rafael Calderón administration (1990-1994) halted the DGF's reform efforts (Mendoza 1990). The Constitutional Tribunal mandated a revision of the law to conform to constitutional law. This opened a prolonged policy debate over forest policy and the MIRENEM's institutional structure. A new forest law was not signed until April 1996.

During Calderón's government, a broad coalition of social and state actors sought to reverse the trade-offs over sustainable development established by the Árias government. That coalition included the new minister and vice minister of MIRENEM; prominent environmental NGOs such as the Tropical Science Center (Centro Científico Tropical — CCT) and the San Carlos Forest Development Cooperative (Cooperativa para el Desarrollo Forestal de San Carlos — CODEFOR-SA); the regional headquarters of the U.S. Agency for International Development; and landowners

(Barrau 1993; Peralta 1993; Salazar 1994). These forces advocated market incentives for sustained-yield forestry, state support for large-scale plantations, and a sharp reduction in the regulatory powers of the DGF.

This, however, was mainly a rear-guard action. The minister and vice-minister of the MIRENEM were actually more interested in preservation than sustainable development (Boza 1997). Their priority was passage of legislation that would reorganize the DGF, the Park Service, and the Wildlife Service into a SINAC — a schema in which the Park Service would take center stage. Nevertheless, the DGF, due to its significant administrative autonomy, together with its supporters in the Agricultural Committee of the legislature (in charge of the bill), managed to block the minister of the MIRENEM (Salas 1993, 1994; Vargas 1993). Consequently, both the forestry law and the SINAC bill languished in Congress for the rest of the Calderón administration.

Biodiversity Conservation Ascendant

Matters came to a head in the administration of José Figueres Olsen (1994-1998). A leader of the Liberation Party, Figueres Olsen's was one of the first governments in the world to make sustainable development a central theme of its administration. MIRENEM's new Minister, René Castro, and his team injected fresh ideas into the policy debates and brought new perspectives to existing conflicts. By 1997, Costa Rica's institutional and legal landscape had changed radically in matters related to conservation in general and the forest in particular.

Minister Castro and his team were decidedly more technocratic than past heads of MIRENEM had been. They relied on cutting-edge technical and administrative skills and ideas learned abroad to formulate policies, which emphasized administrative decentralization, underscored the biodiversity conservation component of sustainable development, and relied on market-oriented policy instruments for both regulation and financing. With respect to the forest, they focused on its contributions to the global environment, especially its role in regulating greenhouse gas emissions. This was a sharp shift from the state activist and social forestry approaches of the Árias administration and from the more traditional conservationist and laissez-faire tacks of the Calderón administration.

Castro and his team had three main, politically conflictual goals (Segura 1997; Martínez 1997; J. Rodríguez 1997). Administrative restructuring of MIRENEM was their top priority. The thorough overhaul of financing for MIRENEM projects ran a close second and entailed developing new projects more appealing to international donors whose interests had shifted away from social forestry, community reforestation, and sustained-yield production in general. Reformulating the forest bill in light of these ends was the third item on the agenda.

Minister Castro was keen on a permanent administrative restructuring of MIRENEM in the mold of a refurbished version of the SINAC. This meant getting a SINAC bill passed into law through the Congress. The Legislative Assembly, however, stifled him at every turn. In frustration, Castro implemented the SINAC as an act of administrative reorganization created by decree toward the middle of 1995 (Segura 1997). A few years later, the Biodiversity Act gave the SINAC permanent standing (Asamblea Nacional Legislativa 1998). The SINAC fused the DGF, the National Parks Service, and the Wildlife Service into a single administrative unit. (Lobbying by these three agencies to remain independent had been a major source of gridlock in the Congress.) The operative mechanism for the fusion was to be the appointment of the same person to head all three directorates. It was theorized that the fusion would break down bureaucratic rigidities among the three services, rigidities that hindered effective natural resource management, especially in the forest sector. For example, as separate departments active in the same physical areas, they often denied each other necessary cooperation for effective management and oversight. As a result, the overall quality of service and resource conservation efforts declined accordingly.

The SINAC had four general objectives (MINAE 1997). First, to consolidate Costa Rica's protected areas to guarantee the conservation of the nation's biodiversity. Second, to strengthen the management of those areas and their environs. Third, to establish conditions that facilitate the responsible use of natural resources for the economic and social development of the country. Fourth, to ensure — with the participation of civil society — compliance with technical and legal norms established to achieve sustainable management of natural resources.

The guiding principles to achieve these objectives were administrative decentralization, functional deconcentration, client service, and democratization (MINAE 1997). Decentralization meant that most decisions that had been taken in San José's central office would devolve to 11 regional administration centers called conservation areas (*áreas de conservación* — AC). Each AC was further divided into subregions. Decentralization also ensured that most personnel would be stationed outside the capital city. Functional deconcentration meant that the separate departments, DGF, National Parks (Parques Nacionales — PN), and Vida Silvestre (VS), would no longer exist as such. Instead, at the regional and subregional levels, the personnel who used to belong to those agencies would be "polyfunctional," attending to all problems involving resource use, preservation, and protection. In theory, decentralization and functional deconcentration would create the conditions necessary for the provision of better services to the clients (both human and nonhuman) of MIRENEM. Regional and local offices would issue use permits for forests to landowners, process applications for incentives, take care of forest fires, attend to accusations of abuse of protected areas, and manage parks. A streamlined SINAC central office (SINAC Central) would be in charge of defining overall policy and strategy and would standardize rules and regulations for the ACs. Democratization called for greater citizen participation in the regions through local organizations (MINAE 1997).

The ACs were territorial units modeled on the principles of the United Nations' Man in the Biosphere program. Each AC contained core zones focused on protected areas such as national parks or wildlife refuges; economic exploitation in core areas — called nuclei — was prohibited, as preservation was the main goal. Around the core areas were buffer zones, where humans were allowed to exploit nature only in carefully controlled ways. Beyond the buffer zones were areas of unrestricted production.

The establishment of the SINAC was an advance over former administrative structures for several reasons. First, it facilitated the implementation of a key tenet of sustainable development — that environmental problems cross sectoral lines. Second, the SINAC rationalized and streamlined policymaking by strengthening the minister's office, placing it over the heads of departments. Thus, third, the SINAC fundamentally changed the institutional setting for the formulation of forest

policy and its financing. This allowed the executive to press forward with an agenda that previously had been blocked by the DGF. The minister's office was aided in November 1995, a few months after the SINAC decree, by the passage of an environmental law that transformed the MIRENEM into the Ministry of Environment and Energy (MINAE). The statutes of the MINAE further strengthened the minister's power over the heads of departments, which, in turn, facilitated implementation of the SINAC.

The DGF had been one of the main stumbling blocks for the reorientation of forest policy along more market-oriented principles. It had steadfastly resisted reduction of its myriad regulatory, financial, and control functions. Yet, there was a general consensus in the MIRENEM/MINAE, civil society, and international agencies that the DGF had too many responsibilities. As a result, it was unable to accomplish any of them well. By law, the DGF controlled permitting, managed finances, exercised control and oversight over extraction, carried out research, engaged in long-range planning, conducted extension services, designed forest management plans, and formulated industrial policy for the sector (Asamblea Legislativa 1986). In short, the DGF had nominal authority over all aspects of forest policy. Yet, the DGF lacked the personnel and equipment to carry out all of these functions. As a result, the DGF concentrated on issuing permits and managing its financial funds to the detriment of control and oversight of extraction (Árias 1997). Worse, costly and time-consuming red tape in the permitting process, handled by personnel who were overly centralized in the capital city of San José, invited corruption. These characteristics contributed to policy failure in the form of continued deforestation and the lack of sustainable development for the forest sector. Given this diagnosis of the situation, the problem was how to reduce the DGF's responsibilities so that it might concentrate on control and oversight. The SINAC offered one solution to the problem by effectively dismantling the DGF.

A restructuring of financial service delivery was high on the list of necessary reforms. Previously, the DGF had administered four separate trust funds set up to finance the various incentive programs, each with its own board of directors and procedures. Now, the MIRENEM entrusted the management of the four funds to a single independent board, the National Forest Fund (Fondo Nacional de Financiamiento Forestal

— FONAFIFO). In addition to administrative efficiency, it was assumed that this move would improve services to users. Individuals, companies, and organizations would only need to fill out one set of forms and deal with fewer offices once a petition was in the bureaucratic pipeline.

In a separate but related move, Minister Castro and his team aggressively pursued new international sources of financing for conservation based on market-oriented instruments. One was the establishment of an office to manage joint implementation projects (Segura 1997). In such ventures, foreign companies (frequently energy utilities) that emitted greenhouse gases could buy "pollution rights" by paying Costa Rica for the conservation of forest areas. This involved agreements between specific polluting companies and the Costa Rican government. For much the same purpose, the MIRENEM also participated in the creation of a market for tradable pollution instruments in U.S. financial markets. On the domestic front, one-third of a "green" gasoline tax was earmarked for conservation.

These innovative financing arrangements were grounded in a recognition that biodiversity conservation, interpreted as nature protection, had become the highest priority of international donors. This shift toward a preservationist emphasis in the meaning of sustainable development occurred during the United Nations Conference on Environment and Development in 1992. However, Castro and his team were not just pragmatists responding to a shift in circumstances. They shared with the international community a conviction that incentives should support the non-timber environmental services performed by the forest.

Accordingly, the MIRENEM followed a two-track policy. One track established an economic incentive for conservation in 1994: the Certificate for Forest Protection.⁴ To be eligible, owners of forest tracts ranging from one to 300 hectares had to refrain from all exploitation with the exception of ecotourism (Segura 1997). The other track contemplated the elimination of existing incentives for sustained-yield timber production and reforestation and their replacement by credit (Barrantes 1997; J. Rodríguez 1997). In addition to philosophical changes regarding the role of markets in sustainable development, this move also responded to fiscal austerity measures adopted by the government of Costa Rica. Like the rest of Latin America, Costa Rica was also undergoing a process of structural economic adjustment along

more free-market lines. Eliminating traditional incentives, however, proved to be a highly charged political issue, and Castro had to settle for their gradual phase-out.

Taken together, these measures were part of a conscious effort to emphasize biodiversity conservation and to establish a more technocratic, market-oriented approach to forest policy. The FON-AFIFO and the changes in the incentive programs became enshrined in the 1996 forest law. By not authorizing its existence, the new legislation also officially killed the DGF (Asamblea Legislativa 1996). Joint implementation and tradable pollution certificates were pursued separately.

Forest policy also took a decidedly more market-friendly turn concerning private-sector timber production. Command and control were out. Liberalizing and privatizing permitting, extraction, and transportation were in. Castro and his team believed that the myriad rules and regulations related to extraction were cumbersome and invited corruption. They also argued that strict rules regarding extraction hindered the economic development of the timber industry. The focus had been on control over trees, rather than on forest management. Moreover, the requirements were the same for native forests, plantations, and secondary forests. Consequently, it was felt that a reduction in direct government involvement and a liberalization of forest management would be beneficial, adding economic value to the forest, thus, at least in theory, providing incentives not to change land use (Árias 1997; Alfaro 1997).

Given this diagnosis, the new forest law simplified and streamlined permitting for timber extraction to reduce the costs of bureaucratic transactions. Permits were also made valid for longer than one year; less paperwork was required for plantation timber; and conditions were eased to remove trees from fields, small forest remnants, secondary forests, and for the using timber for improvements on farms as opposed to commercialization. Policymakers assumed that landowners would not take advantage of increased private responsibility over compliance with the law to enhance their own gains.

The deregulation of log transportation was also undertaken to reduce private-sector costs and to remove incentives for official corruption. Before 1996, each tree was stamped to certify legal extraction, and each load had to have a manifest stipulating the origin and destination of the timber, the amount approved for extraction, and the pro-

portion of that amount on the truck. The new forest law replaced individual tree stamping with a single symbol for the entire load and a reusable manifest.

In keeping with goal of administrative decentralization and devolution of responsibility to the private sector (meaning less burden and expense for the public sector) as of 1996, private-sector organizations replaced many of the DGF's functions (Asamblea Legislativa 1996; Árias 1997; Barrantes 1997). The institution of the regencies (*regencias*) as a mechanism to improve control and oversight of timber extraction was the most important innovation. Private agents, the regents (*regentes*), were granted the right to take over most oversight and control functions that were once the purview of the DGF. Regents must be members of the College of Agronomists; they are bonded; and they have been granted *fe pública*, meaning the legal presumption of operating in good faith. Regents can design management plans and have the duty to police their clients' compliance with rules and regulations. Regents can be held liable if forest management is found to be out of compliance by MINAE spot checks. Of course, forest owners who could not afford a regent have the right, in due course, to be attended to by a MINAE forester.

Castro and his policy-making team believed that the institution of the *regencia* would increase the efficiency of the MINAE in the forest sector (Árias 1997). The regency freed public-sector personnel to concentrate on inspection and oversight rather than on spending so much time on the permitting process. Although MINAE personnel still had to approve regents' management plans, it was now a one-stop process. A regent presented MINAE with the whole management package; if it was procedurally correct, it was approved. In the past, petitioners had to go to multiple departments for the permitting process and submit to field inspections. All of this had cost time and money and opened opportunities for corruption.

In keeping with the participatory principle of sustainable development, new forest policy offered a space for private-sector and NGO participation in policy formulation and policy implementation through the National Forest Office (Oficina Nacional Forestal — ONF) and the Certifying Commission (Asamblea Legislativa 1996). The ONF, a private-sector institution, is essentially an advisory board to the MINAE, and it is also responsible for research and information

campaigns. The Certifying Commission is a voluntary program in which forest owners open tracts under exploitation to inspection to certify that the extractive process is in compliance with norms of sustained-yield management, as defined by law and further private-sector criteria. Once certified, forest owners are free from government oversight for a number of years.

Conservation vs. Sustainable Timber Production

During the current Christian Social Union Party (Partido Unión Social Cristiano) government of Miguel Ángel Rodríguez (1998-2002), MINAE Minister Elizabeth Odio, who is also the second vice president of Costa Rica, has concentrated on the consolidation and expansion of the market-oriented approach to sustainable development. Most policy debates with respect to the forest centered on the Environmental Services Act, which was sent to the National Assembly in February 1999, where it still awaits final deliberation on the floor of the National Assembly. This act seeks to codify and institutionalize the new system of government funding for the sustainable development of forests, based on payment for environmental services (Pago por Servicios Ambientales — PSAs), established during the Figueres administration. The debate has been couched mainly in the language of market-style development, with social forestry concerns only rarely discussed in legislative commission hearings. At its core, this bill, as did the Biodiversity Law of 1998, addresses the incorporation of biodiversity and environmental services into overall economic growth plans.

The debate over the PSAs and the Environmental Services Act, which replicates many of the controversies aroused by the earlier Biodiversity Law, has been contentious. It reveals a fundamental divide in the market-based environmental discourse between the advocates of biodiversity conservation and forest industrialists, including the logging complex. In other words, the main cleavage is between those who promote absolute forest protection to maintain biodiversity and those who urge state support for sustainable timber production from forests and reforested lands and. Consequently, the central question has become whether forests should be used for wood at all. Environmentalists argue for strict protection of the primary forest, on the assumption that sustainable management is a code term for deforesta-

tion. The forest sector counters that absolute protection stifles economic growth and takes large areas of land out of the hands of potentially productive sectors (Basco and Silva 2000).

Meanwhile, advocates of community forestry as a means to address the livelihood component of sustainable development have lost the foothold they had achieved in the past. The debates over the 1995 forestry law at least saw substantial discussion of peasant livelihood issues. Current debates largely avoid discussion of concrete measures to support poor small landowners as a means to address the social equity component of sustainable development.

Worse, peasant organizations have lost state support due to the phasing-out of government agencies and funds that formerly supported agroforestry and small-scale native species reforestation. First, the demotion of the Department of Peasant Development (Departamento de Desarrollo Campesino) from a full-fledged agency to a small program within the MINAE has robbed organizations built on the ideals of community forestry of effective support within the state (Canet 1997). Second, funds specifically earmarked for community forestry have been terminated. The Fund for Forestry Development's (Fondo de Desarrollo Forestal — FDF) replacement by the system of payment for environmental services has tended to favor larger landholders. This shift has led to a general state of disillusionment in the peasant sector with regard to sustainable development and forest conservation. It has also contributed to substantial disarray among peasant organizations interested in those ideals.

The struggle among conservationists, timber interests, and advocates of community forestry has taken place in a complicated policy-making setting that involves the MINAE, the National Assembly, and policy-making boards created by the Rodríguez administration. Environmentalists mainly interested in biodiversity conservation have gained the upper hand in the MINAE, where Minister Odio has centralized decisionmaking, and used their ascendancy to define policy agendas. This, for example, was the purpose of initial drafts of the Environmental Services Act sent to the legislature. However, two additional institutions ensured wider participation in the policy-making process. One of those venues was the Concertation Commission (Mesas de Concertación), a consensus-building mechanism for setting policy agendas during the Rodríguez administration. The

other was the Agriculture and Natural Resources Committee of the National Assembly. As a result, the final bill was a more well-balanced document, one that included the demands of a broader spectrum of stakeholders.

How did these actors and institutions shape the Environmental Services Bill? Upon taking office in mid-1998, the Rodríguez government issued a decree that established a national consensus-seeking commission — the Mesa Nacional de Concertación — covering a number of conflictive topics, including environmental policy. This proved to be a valuable exercise that brought together actors whose interests were often in conflict with one another, such as supporters of biodiversity conservation, market-oriented sustainable timber production, and peasant interests. For peasant organizations in particular, the Concertation Commission provided an option other than protests by which to influence policy. The resulting documents, which required the signatures of all participating organizations, would serve as the basis for bills the administration intended to submit to Congress.

Yet, this attempt to incorporate diverse viewpoints into lawmaking was only partially successful. The documents emerging from Concertación commissions often changed substantially when presiding ministries edited them for presentation to the relevant legislative commission in the National Assembly. This occurred with the Environmental Services Commission and the translation of its work into the Environmental Services Act, an attempt to codify the system of payment for environmental services into law (Basco and Silva 2000). The Environmental Services Commission focused on three areas: the definition of environmental services, financing, and participation in administrative institutions. Recommendations included provisions for biodiversity conservation, timber extraction, and, although fainter, community forestry and mixed-use. Thus, the commission took into account the interests of conservationists, timber producers, and poor peasants.

The MINAE, however, revised the document strongly in favor of conservationists when it crafted the Environmental Services Act (MINAE 1998b). The definition of environmental services in the bill was skewed toward non-timber functions, such as carbon storage and watershed and habitat protection that reinforce opportunities to pursue bio-prospecting, and scenic beauty. The fiscal incen-

tives for environmental services were biased in favor of conservation, emphasizing the protection of primary forest over reforestation and logging. The proposed administrative structure strongly favored conservationists, weakly included market-oriented timber producers, and shut out environmental and peasant organizations that supported more community forestry-oriented approaches. Yet, the MINAE did not have the last word in the policy-making process; it had to undergo legislative review.

The MINAE presented its draft bill to the Legislative Assembly's Agricultural and Natural Resources Committee in late November 1998. A timber producer alliance of the Costa Rican Forestry Council (Cámara Costarricense Forestal — CCF) and the National Peasant Forestry Coalition (Junta Nacional Forestal Campesina — JUNAFORCA) lobbied strenuously against the MINAE bill in committee hearings (Barrantes 1999; Vega 1999; Alfaro 1999). The CCF, which represented timber industrialists and large-scale reforesters, dominated the coalition. JUNAFORCA, which by then mainly represented medium-sized holdings instead of a poor peasant base, joined the CCF because that it believed the principle of forest use for wood production took precedence over other interests that might divide the two organizations. The CCF gladly accepted aid from an organization that gave its arguments greater legitimacy by including more disadvantaged social groups. Moreover, the CCF/JUNAFORCA alliance had an institutional base of power in the ONF. The ONF gave them official advisory rights in the policy-making process.

Testimony from the ONF/CCF/JUNAFORCA alliance convinced key deputies on the committee of two of their major concerns: first, that the proposed bill shut producers of biodiversity and environmental services (the owners of forests and plantations) out of the decisionmaking process and, second, that the bill, as written, was redundant. It added unnecessary bureaucracy to the system established by the 1995 forestry law, principally to the FONANFIFO and the regents.

The Agriculture and Natural Resources Committee remanded the text to an ad hoc subcommittee composed of the major members of original Concertación working group to formulate a new bill. There, the private sector (including JUNAFORCA), allied with the Costa Rican Network for Private Nature Reserves (Red Costarricense de Reservas Naturales Privadas — RCRP) to write a

draft. This version gave preference to their economic interests and granted them a strong presence in the executive committee (Junta Directiva) of the new National Fund for Environmental Services (Fondo Nacional de Servicios Ambientales — FONASA), which would replace FONAFIFO (MINAE 1999b). Significantly, organizations representing poor peasants or indigenous groups were largely absent from committee hearings and meetings of the subcommittee that recast the bill. Based on the subcommittee's recommendations, the MINAE sent a new draft back to the legislative committee in February 1999. After additional debate, the Agriculture and Natural Resources Committee approved a bill on April 28, 1999, and forwarded it for full floor debate (Basco and Silva 2000; *Tico Times* 1999). As of this writing in February 2001, the bill remains on the plenary agenda of the Legislative Assembly.

In the end, a more well-balanced bill that addressed nearly every objection raised by the major organizations that participated in the policy process was presented to the Legislative Assembly (MINAE 1999a). Duplication of bureaucracy, a major critique of the ONF/CCF/JUNAFORCA alliance, was eliminated by replacing FONAFIFO with FONASA. Fiscal incentives — including a substantial proportion of funds generated by hydroelectric projects — favored the protection of primary forests over their sustainable use by limiting their disbursement mainly to forest conservation and plantations. This was a key demand of environmentalists as represented by the CCT and the Conservation Federation (Federación Costarricense para la Conservación del Ambiente — FECON) in opposition to timber interests. By the same token, funds generated by hydroelectric projects on private land would not be used to pay state debts to landowners whose property had been expropriated to form national parks. A separate account was established for that purpose. Medium- and small-scale producers received a nod, in that FONASA was specifically charged with benefiting them via credits and other mechanisms for forest management, reforestation, establishment of tree nurseries, recovery of degraded areas, and financing technology for the extraction, industrialization, and commercialization of timber. These measures, however, fell short of establishing a specific account for poor smallholder peasants. This was a critical omission. Individual peasants and their generally weaker organizations would have to compete for scarce resources on nearly equal footing with economically and orga-

nizationally stronger social groups: the timber interests.

Representation on the executive board of the FONASA proved to be another contentious issue that was partially resolved in the final bill. The board includes two representatives from the public sector; one from MINAE and one from the Ministry of Agriculture (Ministerio de Agricultura y Ganadería — MAG); two representatives from the private sector to be nominated by the ONF; one from the timber industry; and one from the organizations of medium and small timber producers. In practice, this meant that the CCF would represent medium producers and JUNAFORCA would represent the smaller producers. One spot was also reserved for a national NGO representing private nature preserves, the RCRNP. These were the organizations that would, in the first instance, wrestle with decisions over how to distribute FONASA's benefits. Although they clearly leaned toward market and timber producer interests, a legal definition of environmental services that privileged conservation and plantations over forest management constrained them.

To overcome objections to such narrow representation by environmentalists, organizations of poor peasants, and other government agencies, the Environmental Services Bill mandates the creation of a second policy-making arena, the Environmental Services Advisory Council (Consejo Asesor de Servicios Ambientales — COASA), which is supposed to be an advisory, consensus-building arena for FONASA's decisionmaking process. The COASA is, indeed, a well-balanced organ of representation. It includes one representative each from the following government agencies: the MINAE, the MAG, the Institute for Agrarian Development (Instituto de Desarrollo Agrario, the land reform agency whose inclusion was a key demand of the Mesa Nacional Campesina), the Tourism Institute, the Costa Rican Electricity Institute, and the Costa Rican Institute of Sewers and Aqueducts. Two places each are reserved for the following sectors of civil society: the forest sector, the tourist sector, organizations of agricultural producers, environmentalists, and universities. The interaction of COASA and the executive board of FONASA will determine the distribution of credit, the environmental services to receive incentives, and the form of distribution.

These arrangements notwithstanding, the Rodríguez administration has seen the rift among market-oriented stakeholders widen.

Conservationists and timber producers disagree on the definition of environmental services, which services should receive priority, and the selection of sources of financing. For now, conservationists seem to have the upper hand, based on their ascendancy in the MINAE and that ministry's financial distress. As will be seen in the next section, forest policy debates beyond the Environmental Services Act also support this conclusion.

Successes, Problems, and Trade-Offs

Costa Rica's forest policy reforms are too recent for rigorous evaluation; however, some impressionistic data exist. On the positive side, the red tape involved in receiving and administering the incentive funds has diminished dramatically. This frees both landowners and public officials to carry out other work. By the same token, the *regente* system has increased the supply of people and offices allowed to draw up forest management plans. Again, this has positive benefits for landowners and public officials. The same applies to liberalization of transportation.

What are public officials freer to accomplish? The SINAC has a central office in San José and regional offices, one for each conservation area. Deregulation frees central office personnel to devote more time to agenda-setting, planning, and policy formulation. For the moment, this has meant pursuing cutting-edge, market-oriented strategies to fund biodiversity conservation: joint-implementation, internationally tradable pollution permits, and biodiversity prospecting. Meanwhile, the regional and subregional offices of SINAC carry out policy implementation, mainly interpretations of regulation and oversight. This division of labor allows for more rapid responses to regional and subregional problems.

The creation of the National Forest Office and the Certification Commission have expanded and intensified intra-private-sector communication, enabling these groups to focus on defining goals and elaborating strategies for action. Since the second half of the 1990s, this strategy has concentrated on ensuring that payments for environmental services also include production in the form of sustained-yield timber extraction, reforestation, establishing tree plantations, and industrialization. These private-sector institutions strengthen the participatory component of sustainable development, at least in terms of formal civil society participation in the policy process. The proposed

National Fund for Environmental Services and Environmental Services Advisory Council would expand such participation to conservation groups and organizations of poor peasants as well.

A number of difficulties temper these positive assessments. The bureaucratic process may have been streamlined, but the decline of public-sector commitment to adding value to the forest and plantations in order to manage them sustainably leaves substantial tracts of privately owned forests open to destruction by unsustainable extraction. From the very beginning of José Figueres' administration in 1994, Minister Castro and his team wanted to dismantle the incentive system, with the exception of the conservation certificates (Certificados de Conservación del Bosque — CCBs). During the Rodríguez administration, Minister Odio has continued the trend. The two ministers' views were in keeping with their governments' commitments to fiscal austerity, economic stabilization, and free-market economic restructuring programs.

Declining budgetary allocations for the various forestry incentive programs (managed forestry, reforestation, plantations, and conservation) were part of the problem. The 1996 Forestry Law stipulated that one-third of a new gasoline "green" tax should be apportioned to FONAFIFO. But the Treasury Department refused to release those funds to MINAE and instead sent the "green" revenues to a general fund (Caja Única) and disbursed them for different purposes. During the Figueres administration, the private sector (primarily timber industrialists and JUNAFORCA) put intense political pressure on President Figueres himself to keep incentives for production and reforestation (CCF 1997; Rivera 1997). His administration negotiated with the Treasury Department for a much smaller share of the gasoline tax, less than 20 percent. In 1998 (the date of the latest available complete annual figures), the Rodríguez administration had received about the same share of the tax (Barrantes 2000b).

These funds were barely enough to cover existing commitments and were insufficient for program expansion. Not only that, but the disbursement of incentives for reforestation and forest management has been slow and erratic (Barrantes 1997). Meanwhile, although FONAFIFO is accepting new contracts, most are for conservation (Barrantes 2000a). Further proof of declining state commitment for sustainable forestry came in May of 2000, when Minister Odio abolished the

managed forestry category of the payment for environmental services system. MINAE's rationale — in part echoing conservationist critiques — was that under tight budgets, it made no sense to pay the forestry industry for the production of products they planned to profit from in the marketplace (Sánchez 2000). Timber interests suspect that Minister Odio welcomed environmentalists' complaints because she wants to reassert state control over the forests. They warn that landowners now have an incentive to cut trees without any type of sustained-yield management plans, increasing deforestation (Barrantes 2000a). And it is not as if most of the budget for fiscal incentives goes to forest management. Only one-tenth was allocated for that purpose. The forest protection category accounted for seven-tenths of total expenditures for environmental services, although the payment per hectare was less than for forest management (Barrantes 2000a).

The sources of additional funding sought by FONAFIFO underscore the trend away from managed forestry. FONAFIFO has pinned many of its hopes on a World Bank loan (Asamblea Legislativa 2000). As the World Bank no longer supports timber production, one assumes the funds will be allocated to conservation. FONAFIFO is also relying on money from power companies for watershed protection, which centers on conservation and reforestation, not timber use. Furthermore, FONAFIFO is searching for new private-sector funds, such as payments from tourism-related companies that use forests as business capital as well as new joint implementation contracts — all biased toward conservation (Basco and Silva 2000).

The implementation of administrative decentralization has introduced uncertainties that make it difficult for the public sector to carry out its roles of planning, regulation, and oversight or to provide prompt attention to those eligible for government services. For example, substantial confusion over rule interpretation reigns at the regional and subregional levels. The variation in interpretation across administrative boundaries hampers program implementation, which now hinges on the actions of private-sector, small farmer, and peasant organizations and producers. There are no clear signals for them to follow. Moreover, companies and NGOs have to deal with each regional and subregional headquarters separately, more work than these organizations are equipped to handle. As a result, their efficiency declines, and

members become discouraged. Extraction and conservation programs begin to suffer because individuals have fewer incentives to comply with rules and regulations (Barrantes 1997).

MINAE personnel cutbacks aggravate the problem. Fewer public-sector officials are available to handle the claims at the regional and subregional levels. They are swamped with petitions for rule interpretations. Uncertainty over their regulatory function hinders them from carrying out their oversight roles, which require time to go out into the field and inspect. The lack of adequate transportation for those officials further hampers their oversight capabilities, as does the absence of coordination between departments when conservation area boundaries do not coincide with those of local ecosystems (Araya 1997; González 1997; Martínez 1997; E. Rodríguez 1997).

Questionable MINAE commitment to the decentralization process under Minister Odio compounds these difficulties. Her tendency to centralize management led to antagonism between MINAE and the regional councils of the conservation areas. Moreover, despite some success stories, many environmentalists consider decentralization a failure because they are underrepresented on the regional councils (Mora 1999). In part, SINAC local councils have failed to achieve the promised level of civil society participation because of MINAE's difficulties in motivating local groups to participate in discussions. However, there is some evidence that this may be largely due to a lack of effort and commitment by MINAE itself (Gutiérrez 2000).

What lies at the root of MINAE's flagging interest in decentralization? Perhaps Minister Odio is more interested in restructuring the MINAE to provide for more effective and cohesive policymaking in concert with the Ministries of Health and Agriculture to avoid duplication, complexity, and turf battles (Odio 2000). After all, air, soil, and water pollution had been overlooked by existing legislation. Such a goal would be compatible with her recent attempts to have the Constitutional Tribunal (Sala IV) of the Supreme Court abolish the National Commission for the Management of Biodiversity (Comisión Nacional para la Gestión de la Biodiversidad), which was established under articles 14-22 of the Biodiversity Law. That commission placed MINAE in competition with other line ministries.

Declining budgets and problems with decentralization have a negative impact on the public

sector's oversight capacity (González 1997; Martínez 1997). This invites corruption of public officials and cheating by the private sector, making it next to impossible to control extraction rates. Moreover, less ethical regents are tempted to draw up extraction plans based solely on data provided by the client (who has an incentive to extract as much as possible), without field visits in either the planning or extractive stages. Forest industry representatives seem unconcerned, arguing that state control of tree-cutting under the DGF system was no better than the current system (Barrantes 2000a). Others in the sector, such as the RCRP, argue for reforms of the *regente* system (Marín 2000). They believe that abuses can be reduced by using biologists and ecologists as forest inspectors or at least including them on inspection teams. Environmentalists currently hope to address these issues in the MINAE commission assigned to evaluate and change the 1998 Biodiversity Law.

However, insufficient oversight has other sources as well. Under current guidelines, the deregulation of transportation contributes to overextraction (González 1997). With the current manifest forms, it is impossible to control for sustained-yield logging. Moreover, liberalization of extraction from small landholdings lends itself to abuse because farmers have begun to subdivide their land among relatives and associates in order to reap the economic benefits of timber on their property (J. Rodríguez 1997). Their extraction patterns are clearly not oriented toward sustained-yield extraction.

As currently implemented, the *regente* system allows larger landowners to have advantages over smallholders and poor peasants (Cárdenas 2000). Between 1999 and 2000, environmentalists — who oppose any logging of primary forests — criticized the system for promoting deforestation, as it helped larger landowners (the only ones who can afford *regente* services) to extract timber from forests more freely. Evidence from frontier regions such as Osa Peninsula and Tortuguero/Barra Colorado supports such conclusions (Evans 1999, 180-181). Meanwhile, organizations that offer *regente* services, such as CODEFORSA, prefer larger projects because they make more money per unit of staff time than with a number of smaller projects. The fact that small-scale landowners who could not afford *regente* services had a right to service by MINAE foresters was of little help. Most had difficulty understanding bureaucratic proce-

dures or lacked time to comply with them. Moreover, MINAE lacked sufficient personnel to supply timely service.

Forest policy reform from 1994 to 2000 has implied the acceptance of two common trade-offs regarding the major components of sustainable development. The first one has been a preference for conservation over sustained-yield management or multiple use of the forest.⁵ As currently designed, the turn to global market-oriented instruments for the funding of forest policy has tied revenues to conservation of core areas over buffer-zone management and sustainable-ecosystem management beyond that. The money raised is to be spent on the preservation of forests and reforestation. Meanwhile, deregulation, liberalization, privatization of oversight, and slashing incentives for the economic use of the forest are clear signals that the public sector is giving up on sustained-yield and multiple-use management of native forests. For all intents and purposes, native forests in the hands of private individuals who are not interested in conservation have been abandoned to their fate.

The second trade-off in Costa Rica's forest policy is a clear choice in favor of market-oriented conservation and reforestation instead of support for community development or cooperative behavior. It is up to individuals to respond or to adjust to the incentives offered. Cooperative behavior for the development of peasant or smallholder communities is discouraged. Existing cooperatives and peasant and smallholder organizations are threatened by diminished revenues; their operating budgets partly depend on a percentage of the funds generated by government incentives. As a result, cooperatives that offer *regente* services have a strong incentive to ignore small, poor peasants. They get more revenue per staff member by accepting large projects. Other cooperatives collapse as a result of poor business decisions when they decide to establish private enterprises (Canet 2000). The most common problem is size. Organizations attempt ventures on too large a scale. They overreach their human resources as well as technical, managerial, and financial (debt) capacities. Bankruptcy and the end of the cooperative is often the result. Stronger peasant-specific state agencies could help prevent this problem by offering timely advice.

The SINAC and decentralization have also negatively affected the provision of advocacy services. The social services organizations have to maintain

a presence in many regional offices (instead of just one central office) and keep up with sui generis interpretations of rules to do the paperwork for their members, one of their primary functions. Social services organizations have also lost institutional presence and support in the executive branch of government with the dismantling of the DGF, which effectively gutted the DECAFOR (Canet 1997; Bauer 1997). Price competition from regents saps organizational strength by luring away members (Barrantes 1997).

The bias toward the market extends to ecotourism, an integral element of SINAC's strategy. Established Costa Rican and foreign firms and conservationist, urban-based NGOs dominate. The SINAC does publicize grassroots ecotourism as an attractive land use option for peasants. But the lack of concrete support has led to the failure of many attempted ventures. This has generated a climate of frustration and resentment among peasants. Moreover, the Certificate for Sustainable Tourism (Certificación para la Sostenibilidad Turística — CST)⁶ provides little room for participation by local communities (Baez 2000). Problems with the CSTs are caused, in part, by budgetary constraints that restrict the Costa Rican Institute for Tourism's (Instituto Costarricense de Turismo — ICT) extension programs. Meanwhile, a national consortium of grassroots tourism projects is in discussion with the ICT to modify the CST program (Monge 2000).

What are the implications of these developments for the implementation of sustainable development in Costa Rica's forests? Costa Rica's new forest policy emphasizes a market-oriented view of sustainable development that favors conservation (understood as habitat preservation) over sustainable use, and it stimulates reforestation by large-scale corporations or landowners. It is hoped that those same agents will engage in sustained-yield management of natural forests, but there is resignation over the fate of privately owned forests if they do not. The moral imperative is not to subsidize timber extraction, especially from primary forests. Under these circumstances, priority must be given to the conservation of primary forests protected in expanding national park systems and by concentrating incentives on the restoration of pasture, secondary forests, and tree plantations. The global, regional, and local environmental functions of forests are stressed (greenhouse gas emission control, soil erosion control, watershed maintenance). Focusing on these envi-

ronmental services allows policymakers to emphasize conservation while sidestepping thorny questions of social order; in this way, they can avoid the difficulties of formulating and implementing redistributive policies.

Costa Rica's new forest policy neglects the basic needs component of sustainable development. It reveals little interest in integrating the satisfaction of basic needs with biodiversity conservation and the sustainable use of resources. This is a paradox, given the dominant discourse of including local communities in conservation policy. The irony is compounded by the struggle between timber interests and conservationists for the support of peasant organizations. Each side claims it has the interests of the peasantry at heart.

The problem is that since the middle of the 1990s, Costa Rican forest policy has dismantled or ignored the sociological and institutional requirements for effective programs to meet the basic needs component of sustainable development. Gone is the support for collective action to build cooperatives to pool resources, generate autonomous peasant organizations, train personnel (thus raising skill levels), add value to timber, and encourage nontimber use. Thrust into the market, established cooperatives find it difficult to resist the temptation to overreach themselves and be destroyed, as occurred with the Guanacaste Forest Development Association (Asociación Guanacasteca de Desarrollo Forestal — AGUADEFOR). Crucial state support in the form of specialized, independent agencies, budgets, credit, and trust funds specifically allocated for peasant development have been dismantled, gutted, or terminated. The majority of unorganized, poor, smallholders and peasants are left to their fate in the market. The entrepreneurial among them may individually attempt microenterprises only to find they cannot succeed, as has been the case with ecotourism. The eligibility requirements, paperwork, and bureaucratic rules for meager per hectare conservation benefits discourage individual participation in the conservation certificate or reforestation program. From the small, poor peasant's point of view, the market encourages them to sell or abandon their holdings, migrate to cities, or become day laborers on banana plantations. At best, smallholders might be able to sell timber to established companies.

The discourse of participation has displaced the vital sociological and institutional conditions to meet the basic needs criteria of sustainable devel-

opment. Including organizations that represent smallholders in the policy-making process becomes the primary criterion. Concerns over the organizations' effectiveness or representativeness are not at issue. Little thought is given to whether an organization can actually make its voice heard, much less heeded, when it is but one of many on a policy-making board — a role that is potentially even more marginal if the institution is only an advisory board, as so often is the case. Moreover, there is the question of the organization's representativeness. Does it really represent poor, smallholding peasants, or does it articulate the interests of its more prosperous segments?

In conclusion, a crude pluralist image of policymaking informs the discourse: the mere inclusion of an interest group in the policy process implies that policy output will address their substantive demands. Such an image ignores the economic, institutional, and political asymmetries of power among peasant organizations, the private sector, and mainstream well-established NGOs. This conception of participation accompanied by programs that offer jobs and training to only a few individuals (park rangers and parataxonomists) or that emphasize environmental education will not suffice to meet the basic needs criteria of sustainable development. Participation in the policy process is a necessary but not sufficient condition. The problem of power asymmetries for peasant organizations and their representativeness must also be addressed. Under current conditions, mainstream state institutions, private-sector groups, and environmental NGOs benefit the most. However, the tug of war between centralizing and decentralizing trends has left even these relatively privileged sectors of civil society uncertain over the effectiveness of their participation.

The Politics of Inclusion

The trade-offs discussed above are more the result of politics and ideology than inherent incompatibilities between biodiversity conservation and the satisfaction of basic needs through the sustainable use of resources. The forest policies of the 1980s and the 1990s were shaped by shifts in the political fortunes of opposing political camps. One camp encompassed a network of professionals who believed in community development and cooperative behavior as an approach to satisfy the basic needs component of sustainable development (Silva 1997). These professionals

gained ascendancy in the Arias government from 1986 to 1990. Their positions in the state and consultancies to the MIRENEM gave them a base of political power. Because Costa Rica is a country rich in associational life, it was an easy step for these officials to ally with peasant and smallholder cooperatives seeking a solution to the depressed economic conditions of their regions in the wake of the collapse of cattle, sugar, and cotton markets. Those cooperatives grew, multiplied, formed networks, and federated as the National Peasant Forestry Coalition (JUNAFORCA) (Solís 1993).

The external sector, mainly social democratic Scandinavian governments (the Netherlands in particular), provided much-needed, in fact, pivotal support. Programs, funding, and their insistence on a special office for peasant affairs in the DGF — the DECAFOR — were key to the flourishing of a community development approach to sustainable development in the forest sector (Segura 1997). A myriad of other international programs, sponsored by developed countries, emphasized community participation in buffer zone management around national parks (Umaña and Brandon 1992).

Costa Rica's industrial timber interests — from both the natural forest and plantation subsectors — compose the other camp, along with influential, well-established environmental think tanks, such as the CCT. These groups have opposed the emphasis on community development and growing government regulation on the exploitation of the forest. However, to all intents and purposes, they had no political organization or allies. The Calderón administration changed that. New appointments to the MIRENEM provided the private sector with more sympathetic ministerial leadership (Silva 1997).

Nevertheless, once again, external actors proved pivotal. The United States Agency for International Development's (USAID) regional office for Central America helped to organize the private sector and gave it programmatic orientation. The director of USAID's rural development office worked hard to model Costa Rican timber interests along the lines of those of Chile. To that end, together with key private-sector figures, he ultimately helped to establish the Costa Rican Forestry Council (CCF) (Barrau 1993; Peralta 1993; Barrantes 1994). Private-sector timber interests in it lobbied for liberalization and deregulation of the timber sector — both for plantations and for

native forests under private ownership (Peralta 1993; Sage 1994; Alfaro 1997).

During the Figueres administration, USAID dropped into the background, and the CCF took center stage. The CCF was dominated by producer organizations representing larger-scale timber interests. However, organizations that included small-scale producers also participated, including the JUNAFORCA, although the latter had an ambivalent position. JUNAFORCA's members wanted less government regulation and believed the CCF provided a vehicle to protect peasant interests effectively in the struggle to reform forest policy (Solís 1995). For its part, the CCF advocated deregulation, liberalization, and the maintenance of the incentive structure. It also wanted institutionalized, effective participation of the private sector in future policymaking (J. Rodríguez 1997). JUNAFORCA tirelessly added modifications to CCF proposals in keeping with peasant-sector interests (JUNAFORCA representation in production and policy-making boards, control over revenue earmarked for the peasant sector, and so on) (Solís 1995).

The Figueres administration shifted the balance of forces in the CCF in favor of large-scale timber interests and away from the organizations built around the incentive system, which helped landowners navigate bureaucratic regulations, carry out silvicultural tasks, and facilitate access to the funds (J. Rodríguez 1997). The directors of the SINAC and the framers of the law's regulatory body had long been part of the forces that favored liberating private-sector timber interests from government oversight and regulation. These officials were more interested in effective promotion of ecosystem management, with a specific focus on forest conservation. Some of their critics imply that these officials are not very concerned about what happens to the forest under private ownership and simply want well-run parks.

Moreover, key SINAC officials vigorously supported the private sector's interest in developing Chilean-style plantations to export timber (Alfaro 1997; Árias 1997). Key private-sector organizations, such as the National Forest Office, the Certification Commission, and the CCF championed the project. As in the Chilean model, large-scale private timber interests and reforesters control those institutions. In a system where markets dominate, the private sector uses the peasant sector's lack of resources and the absence of government institutional support (after dismantlement of the

DECAFOR) to corral peasant interests and to force their acquiescence to large-scale timber interests. Brandishing efficiency arguments, they maintain that peasants have no place in production, development of multiple use of forests, or in reforestation with commercial intent.

Although the situation has remained essentially unchanged under the Rodríguez administration, there have been changes in emphasis. For example, the policy debate hardened between timber interests who wanted state support for wood production and conservationists who advocated absolute forest protection to maintain biodiversity. This narrowing of the policy debate influenced a second change. It generated differences among peasant organizations over the definition of their own best interests and who their allies might be. JUNAFORCA, the principal umbrella association for forest-based peasants during the policy debates of the 1980s and 1990s, experienced the biggest transformation.

In the late 1990s, JUNAFORCA's leaders concluded that the peasant sector was at heart a productive sector and that its best chances for development lay with the forest industry rather than with environmentalists (Vega 2000). JUNAFORCA felt environmentalists had abandoned peasants by transferring their support to private nature reserves in an attempt to promote strict protection of forests above all else. Moreover, JUNAFORCA resented the fact that environmental organizations, such as the National Institution for Biodiversity (Instituto Nacional de Biodiversidad — INBio), have monopoly access to public land in protected areas, while peasants may not even utilize isolated pasture trees for their wood needs (Espinoza 2000). Further, environmentalists had made wood production more expensive by pushing for regulations at every step in the production process that undermined the peasants' ability to contribute to the development of the national forest industry (Barrantes 2000a).

Based on these redefinitions, during the Rodríguez administration, JUNAFORCA has reestablished its 1995 alliance with the forest industry, as represented by the Costa Rican Forestry Council within the National Forest Office. Once again, the perception of a greater danger emanating from the conservationist camp spurred JUNAFORCA to sublimate its ambivalence over timber industrialists. This was a significant step because later in 1995, JUNAFORCA had concluded that the CCF had merely used their organization to

claim broad societal support for the retention of state subsidies for managed forestry and plantation forestry (Solís 1995). Once the timber industry had achieved its goal, it ignored the programmatic demands of JUNAFORCA.

In addition to its perception that environmentalists posed a greater threat than timber industrialists, two other factors contributed to the change in JUNAFORCA's posture. One was a redefinition of the social group it represented. The organization's revised focus is on "peasants" whose holdings permit them to participate individually in a market-driven timber industry. JUNAFORCA now speaks mainly for relatively well-to-do peasants who are, in fact, in the Costa Rican context, medium-sized landowners. In JUNAFORCA's view, a landowner with a 100-hectare farm is still considered a peasant; broader yet, a peasant is anyone who makes his/her livelihood from use of the land in rural areas. By the same token, JUNAFORCA now pays little attention to poor, small landholders because they cannot contribute much to the development of the forest industry — they have inherent limitations in producing uniform high-quality timber in a timely fashion (Espinoza 2000).

A change in JUNAFORCA's organizational center of gravity — from AGUADEFOR to CODEFORSA — accompanied this redefinition of the social sector it served. AGUADEFOR had had a strong commitment to small, poor peasants as well as to those who were better off. AGUADEFOR promoted grassroots development, independence from the timber industrialists, and had strong links to the municipal peasant organizations of Guanacaste. But AGUADEFOR collapsed as a result of an ill-considered expansion into the marketplace, as it tried to create a timber company capable of competing with established private-sector firms.

CODEFORSA, from the more central region of San Carlos, had been in competition with AGUADEFOR for leadership of the peasant forestry movement throughout the entire period. Its principal organizers had always been strong supporters of market approaches to sustainable forestry. They had been in the forefront of medium-sized landowners' efforts to break the more cooperative-centered approach to grassroots development. CODEFORSA was more interested in finding a niche within the established forest industry than in creating an independent peasant sector.

Because of these changes within JUNAFORCA, many grassroots forestry organizations do not consider it as representative of their interests. Moreover, they are rarely, if ever, consulted or contacted by it (Cárdenas 2000). Consequently, peasant-friendly forestry groups, such as the Indian Peasants for Community Agroforestry Coordinating Committee (Coodinadora Indígena Campesina de Agroforestría Comunitaria — CICAFOC), conclude that JUNAFORCA's policy stance is unrepresentative of peasant needs. Yet, if the wood sector seems to have little to offer, more grassroots-oriented peasant forestry organizations see equal or less potential support from environmentalists at the national level (Acosta 1999). By and large, these organizations have been left on their own in their search for projects and funding sources that emphasize multiple use of the forest. The redefinition of JUNAFORCA's interests and representativeness suggests that peasants — defined as poor, small landholders — have largely been shut out of participation in policy formulation at the national level. JUNAFORCA, after all, is the only organization within the CCF and the National Forest Office that claims to represent peasant interests.

This conclusion may seem at odds with claims by the timber sector and environmentalists alike that peasants are a desirable strategic ally in Costa Rica's forest policy debate. Both sides have argued forcefully that their proposals more effectively fulfill the participatory criteria of sustainable development. The problem is that, for the most part, the timber industry's and the environmentalists' overtures to peasants are in word only. For example, the National Plan of Forest Development, prepared by the ONF/MINAE, focuses on strengthening the capacity of Costa Rica's industrial forestry sector (MINAE 1998a). Conversely, the National Biodiversity Strategy, prepared by INBio/MINAE, focuses on the protection of primary forests through economic valuing of the environmental and biodiversity services these ecosystems provide (MINAE 2000). Both claim that their plan attacks rural poverty and ensures the active participation of local communities in the management of natural resources. Yet, both plans have little, if any, concrete measures that include the social criteria necessary to implement those claims. Mere promises of a few jobs and training programs are certainly insufficient. This strategy allows the ONF to include JUNAFORCA as an integral member in its lobbying efforts while ignoring the interests of poor peasants. By the same token, peasant organi-

zations are reluctant to ally with environmentalists because they perceive that social criteria are only of secondary concern to conservationists, if they understand them at all (Basco and Silva 2000).

Framed this way, the political and ideological divisions among three opposing forces seem unsurmountable. Resurgent conservationists and large-scale timber interests are the strongest. Conservationists seek to blend traditional concerns about primary forest protection with new ideas drawn from conservation biology and environmental economics, mainly through the concept of payment for environmental services. They seek to limit payment of public funds to forest protection (parks and reserves), restoration, and reforestation. Timber interests want to retain access to primary forests (preferably with public incentives for managed extraction), receive subsidies for plantation forestry and technological improvements of their enterprises, and benefit from reduced regulation. Timber interests have also sought to break down independent peasant-sector organizations in the state and civil society to eliminate competition for markets and scarce public and international resources. Meanwhile, peasant organizations favor community development (organizational aid) with small-scale multiple use of resources for the satisfaction of the basic needs component of sustainable development.

Costa Rica's democratic political system and pluralist style of policymaking offer an arena for reconciliation of these divergent interests. However, its institutions are not neutral. After a brief interlude in the 1980s, conservation and timber interests have fared better than peasant organizations. Current international attention on market instruments for biodiversity conservation in addition to domestic political factors (control over institutions) favor conservationists over others. International organizations and multilateral lending institutions frequently target conservation over use, and conservationists dominate the MINAE. However, this does not mean that timber interests are helpless — they are adept at using Costa Rica's democratic and pluralist policy-making process to advance their cause. Conservationists may have gained the upper hand in the MINAE, but timber industrialists have strong, effective representation on MINAE policy-making boards, and the legislature also protects their interests, as was seen in the case of the Environmental Services Bill.

In this context, peasant organizations have become the third and least powerful interest group by far. The discourse of sustainable development demands their inclusion. But their involvement is limited to participation in policy-making boards in a highly subordinated manner. No thought is given to the provision of the organizational and material aid necessary for peasants' success. Moreover, their principal officially recognized interlocutor — JUNAFORCA — has changed in ways that call its representation of peasants into question. It has recast its demands in terms of narrow timber interests and has given up representing poor, small-scale peasants and cooperative efforts for multiple use of the forest.

This situation suggests that Costa Rican policymakers and many international organizations have made their choice with respect to trade-offs among the components of sustainable development. Policy mainly supports conservation and market-oriented forestry. Meanwhile, rhetoric and discourse aside, commitment for community development and small-scale multiple use by poor peasants has declined precipitously.

However, this trade-off is not necessarily permanent. Bringing together domestic and international actors to include peasant concerns over livelihood via community development and multiple use of the forest is possible within existing conditions. Because Costa Rica depends strongly on international agencies to support its environmental policy, the international arena offers peasant organizations a promising entry point. Most important, although most international agencies currently focus on market instruments for biodiversity conservation and sustainable development, their posture does not axiomatically exclude peasant development. To the contrary, these agencies officially recognize the need for it.

Unfortunately, most international agencies' efforts toward peasant development have been misguided. Project proposals consistently downplay the elements necessary to implement community development: organization and long-term technical assistance for small-scale projects (that may be scaled-up later). Programmatic lapses are probably a function of the professional training of those drafting the projects, who are frequently steeped in conservation biology and environmental economics. Yet, these disciplines also stress that satisfaction of basic needs and community involvement in projects is necessary for project success.

What conditions, then, might lend substance to the discourse on community development as the means to fulfill the livelihood component of sustainable development in Costa Rica? At minimum, three factors are necessary. First, peasant organizations themselves and the national and international NGOs that support them must continue their unflagging efforts to influence the policy agenda. The social afforestation projects of the 1980s had an important organizational consequence. They spawned several strong peasant organizations that are likely to persist, given Costa Rica's rich tradition of a strong civil society. That organizational base provides a platform from which to act, from which to participate in project formulation and policymaking. Crucial, however, is that such participation must include the creation of stronger, independent, peasant-specific departments within the MINAE (such as DECAFOR had been); special accounts for community forestry; and organizational assistance for peasant associations. These are key elements of the sociological context necessary for the success of social forestry.

Recent events suggest that movement in this direction is possible. For example, when JUNAFORCA still represented groups that supported social forestry, it helped to force the Figueres administration to keep the incentives for reforestation and managed forests for smallholders as well as large-scale producers. During the Rodríguez administration, the peasant organizations involved in the Mesa Campesina, with help from legislators, managed to attain representation on a significant policy-making board, the Environmental Services Advisory Council (Consejo Asesor de Servicios Ambientales — COASA). This was a small but important step. It included peasant organizations other than JUNAFORCA — which had ceased to represent them adequately — in the policy-making process on a permanent basis.

The divisions and dissensions among in the organizations that represent peasants, smallholders, and owners of medium-sized landholdings are debilitating but could be transitory. The JUNAFORCA's alliance with the timber industry may be only a marriage of convenience in light of the perceived danger conservationists pose, and JUNAFORCA may well walk away from it again.

For now, however, the main task of peasant organizations is to continue to prove the viability of their models. Currently, Central American regional organizations are their main source of

support (Brenes 1999; Madrigal et al. 1997). In 1994, Costa Rica ratified the Treaty for the Conservation of Biodiversity and Protection of Protection of Priority Forestry Areas in Central America (Convenio para la Conservación de la Biodiversidad y Protección de Áreas Silvestres Prioritarias en América Central). As part of that treaty, the Central American Countries agreed to make the Central American Commission for Environment and Development (Comisión Centroamericana de Ambiente y Desarrollo — CCAD) the main organ for coordinating region-wide forest policy (Asamblea Legislativa 1994). Peasant interests are relatively strongly represented in the CCAD, with CICAFOC from Costa Rica receiving funding from the International Union for the Conservation of Nature (IUCN) to influence policy and implement projects (IUCN 2000). By the same token, the Forest, Trees, and Peoples Programme (FTPP) of the United Nations Food and Agriculture Organization also represents and aids peasant interests (Chinchilla 2000; *La República* 1997). In terms of policymaking, these organizations have made some headway at the regional level; however, at the national level they have concentrated on influencing project design and have little influence on high-level policymaking.

These sources of support and small successes offer peasant and smallholder organizations breathing room for survival, a space for reorganization in a relatively hostile policy environment. Part of that process of organizational reconstruction should involve intellectual growth to take advantage of new opportunities in the international arena. Peasant and smallholder organizations might be well advised to study the core concepts of conservation biology and understand how peasant interests fit into them. From there, they can formulate innovative arguments about how peasant life contributes to maintaining the ecological balance that allows forests to provide their myriad environmental services. The question these organizations need to answer is: how do peasants enhance, facilitate, or preserve the forest's ability to provide its environmental services? How would the absence of those activities be detrimental? In short, peasant organizations must become intellectually and technically more sophisticated. This they can do with the patient, diplomatic, and sensitive help of international organizations, NGOs, and universities. Then peasant organizations will be in a position to influence the programmatic content of biodiversity conservation projects in

ways that include peasant concerns over livelihood.

External conditions are more favorable to such activism than in the recent past. International institutions such as the World Bank, under pressure from NGOs and developing country governments, are increasingly concerned about livelihood needs and biodiversity conservation and are more committed to forming interdisciplinary teams for project design and implementation than they once were (IUCN 1980; Hopkins 1995,84). This is partly a direct result of the fact that social equity questions are once again taking center stage in policy debates, now that the basic issues of economic restructuring and transition to democracy in Latin America seem to have been settled. Grassroots organizations and their supporters stand to gain much from constructively showing how livelihood fits in with the new discourse of biodiversity conservation along with sustainable development. Conservation groups cannot be expected to make livelihood issues their first priority, but they may be persuaded to deal with them more effectively. If conservation groups perceive that peasant organizations understand their issues, can contribute to winning funding, and can help with project implementation, livelihood issues may again become higher priorities on Costa Rica's policy agenda.

NOTES

1. Sustained-yield use occurs when natural renewable resource extraction equals or is slightly lower than the rate of replacement.

2. "Shifted cultivators" refers to poor peasants who depend on slash-and-burn agriculture for their subsistence, meaning that they clear a plot of land from the forest, cultivate it for a few years, and when the soil gives out, they move on to clear new sections of the forest.

3. "High-grading" is the practice by which loggers quickly extract all of the commercially valuable trees, leaving behind a degraded and economically devalued forest stand.

4. The fiscal incentive system René Castro wanted to dismantle had been established between 1988 and 1995, and it included the following principal elements: Certificados de Abono Forestal (CAFs); the Certificados de Abono Forestal por Adelantado (CAFAs), and the Certificado de Abono Forestal para Manejo del Bosque (CAFMA). Castro wanted to keep the Certificados de Conservación del Bosque (CCBs), which compensated forest owners who did not cut down their forests for their non-timber environmental services.

5. Multiple use of the forest is a concept that assumes that forests have many economic uses besides timber extraction. Therefore, plans for the sustainable development of forest areas should not focus exclusively on the commercial value of the trees in a timber stand. One can also practice small-scale agriculture and husbandry, cultivate honeybees and ornamental plants, grow cash crops that require shade (cacao, for example), and so on.

6. The Certificate for Sustainable Tourism (CST) program was established by executive decree in 1998 as a response to extensive allegations that the hotel industry was hyping environmentalism without real commitment to ecological sensitivity, a practice known as "green wash." Under the CST program, hotel owners and lodges are certified if the environmental and socioeconomic impacts of their business practices meet specified standards. Certification gives them an official "green" ranking (like a five-star system) that appears in tourist guides. Nonetheless, there are indications that participation in the CST program is biased toward larger hotels and elite-owned ecolodges, and although the Costa Rican Tourist Institute is working with the grass-roots tourism groups, progress will be difficult, given the strength of the larger-scale tourism interests.

ACRONYMS

AC	Area de Conservación (Conservation Area)
AGUADEFOR	Asociación Guanacasteca de Desarrollo Forestal (Guanacaste Forest Development Association)
CCAD	Comisión Centroamericana de Ambiente y Desarrollo (Central American Commission for Environment and Development)
CCF	Cámara Costarricense Forestal (Costa Rican Forestry Council)
CCT	Centro Científico Tropical (Tropical Science Center)
CICAFOC	Coodinadora Indígena Campesina de Agroforestría Comunitaria (Indian Peasants for Community Agroforestry Coordinating Committee)
CST	Certificación para la Sostenibilidad Turística (Certificate for Sustainable Tourism)
COASA	Consejo Asesor de Servicios Ambientales (Environmental Services Advisory Council)
CODEFORSA	Cooperativa para el Desarrollo Forestal de San Carlos (San Carlos Forest Development Cooperative)
DECAFOR	Departamento Campesino Forestal (Department of Peasant Forestry)
DGF	Dirección General de Forestal (Forest Service)
ECODES	Estrategia de Conservación para el Desarrollo Sostenible (Conservation for Sustainable Development)
FDF	Fondo de Desarrollo Forestal (Forestry Development Fund)
FECON	Federación Costarricense para la Conservación del Ambiente (Conservation Federation)
FONAFIFO	Fondo Nacional de Financiamiento Forestal (National Forest Fund)
FONASA	Fondo Nacional de Servicios Ambientales (National Fund for Environmental Services)
FTTP	Forest, Trees, and Peoples Programme (under UN's FAO)
ICT	Instituto Costarricense de Turismo (Costa Rican Institute for Tourism)
IUCN	International Union for the Conservation of Nature
JUNAFORCA	Junta Nacional Forestal Campesina (National Peasant Forestry Coalition)
MAG	Ministerio de Agricultura y Ganadería (Ministry of Agriculture and Animal Husbandry)
MINAE	Ministerio de Ambiente y Energía (Ministry of Environment and Energy)
MIRENEM	Ministerio de Recursos Naturales, Energía y Minas (Ministry of Natural Resources, Energy, and Mines)
NGO	Non-governmental Organization
ONF	Oficina Nacional Forestal (National Forestry Office)
PSA	Pago por Servicio Ambiental (payment for environmental services)
RCRP	Red Costarricense de Reservas Naturales Privadas (Costa Rican Network for Private Nature Reserves)
SINAC	Sistema Nacional de Áreas Protegidas (National System of Protected Areas)
USAID	United States Agency for International Development
VS	Vida Silvestre (Wildlife)

REFERENCES

- Acosta, Ilse. 1999. Testimony of the president of the Mesa Campesina at the Hearings of the Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Asamblea Nacional Legislativa, Acta de la Sesión Ordinaria No. 105, March 3.
- Alfaro, Marielos. 1997. Author interview with then CCF vice president, San José, July.
- Alfaro, Marielos. 1999. Testimony of the president of the Cámara Costaricense Forestal at the Hearings of the Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Asamblea Nacional Legislativa, Acta de la Sesión Ordinaria No. 94-95, January 20.
- Araya, Marco Vinicio. 1997. Araya was one of the directors of the new Fondo Nacional de Financiamiento Forestal (FONAFIFO). Author interview. San José, July.
- Árias, Guillermo. 1997. Árias is a highly placed consultant to government, on the staff of COSEFORMA, wrote regulations for 1996 forest law, and works with SINAC. Author interview. San José, July.
- Asamblea Legislativa. 1969. "Ley Forestal No. 4465." *La Gaceta*, November 25.
- Asamblea Legislativa. 1986. "Ley Forestal." *La Gaceta*, No. 85, 7 May. (Also known as Ley Forestal No. 7174 of June 28, 1990).
- Asamblea Legislativa. 1994. "Ley 7433: Convenio para la Conservación de la Biodiversidad y Protección de Áreas Silvestres Prioritarias en América Central." *La Gaceta*, No. 193, October 11.
- Asamblea Legislativa. 1996. "Ley Forestal, No. 7575." *La Gaceta*, No. 72, April 16.
- Asamblea Legislativa. 1998. "Ley de Biodiversidad No. 7788." *La Gaceta* 101 (May 27).
- Asamblea Legislativa. 2000. "Proyectos: Aprobación del contrato de préstamo entre el Gobierno de la República de Costa Rica y el Banco Internacional de Reconstrucción y Fomento para Financiar el Programa de Pago por Servicios Ambientales." *La Gaceta*, No. 178, September 18.
- Báez, Ana. 2000. Greg Basco interview of Báez, president of Turismo y Conservación Consultores. San José, February.
- Barrantes, Alfonso. 1994. Barrantes was a functionary of the Comisión de Desarrollo Forestal de San Carlos (CODEFORSA). Author interview. Ciudad Quesada, November.
- Barrantes, Alfonso. 1997. Barrantes was general secretary of CODEFORSA. Author interview. Ciudad Quesada, June.
- Barrantes, Alfonso. 1999. Testimony at the hearings of the Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Asamblea Nacional Legislativa, Acta No. 92-93, January 19.
- Barrantes, Alfonso. 2000a. Interview by Greg Basco of Barrantes, executive director of the Oficina Nacional Forestal and of the CODEFORSA. Ciudad Quesada, September.
- Barrantes, Alfonso. 2000b. "Servicios ambientales: Necesidades mínimas a partir del 2001." San José: Oficina Nacional Forestal.
- Barrau, Enrique. 1993. Author interview with Barrau, an agricultural development officer, USAID. San José, May.
- Barrau, Enrique. 1994. Author interview. San José, November.
- Basco, Greg, and Eduardo Silva. 2000. "Campesinos, Timber Interests, and Environmentalists: The Making of Forest Policy in Costa Rica." Mimeo (October).
- Bauer, Jan. 1997. Author interview with Bauer, the first secretary of the Dutch Embassy in Costa Rica. San José, June.
- Boza, Mario. 1997. Author interview with Boza, the former vice minister of MIRENEM during the Calderón administration. San José, June.
- Brenes, Carlos. 1999. "Del paradigma de ordenamiento forestal y de rendimiento sostenido

- al paradigma de ordenamiento sostenible de los ecosistemas forestales." *Agroforestería Comunitaria y Gestión Local del Desarrollo*, special edition: 7-18.
- Browder, John O. 1989. *Fragile Lands of Latin America: Strategies for Sustainable Development*. Boulder: Westview Press.
- Cámara Costarricense Forestal (CCF). 1997. "Aspectos más relevantes de la negociación con las autoridades del MINAE." *Desde El Bosque* 5, No. 23, May-June: 1.
- Canet, Gilbert. 1995. Author interview with Canet, at that time director of the Departamento Forestal Campesino. San José, February.
- Canet, Gilbert. 1997. Author interview with Canet, the director of the Programa Forestal Campesino. San José, June.
- Canet, Gilbert. 2000. Greg Basco interview with Canet, the director of the Programa Forestal Campesino. San José, October.
- Cárdenas, Pablo. 2000. Greg Basco interview with Cárdenas, an environmental law specialist, FECON. October.
- Carriere, Jean. 1991. "The Crisis in Costa Rica: An Ecological Perspective," In *Environment and Development in Latin America*, eds. Michael Redclift and David Goodman. Manchester, UK: University of Manchester Press. 184-203.
- Chinchilla, Alberto. 2000. Greg Basco interview with Chinchilla, a functionary of CICAFOC. San José, March.
- Espinoza, Héctor. 2000. Greg Basco interview with Espinoza, a JUNAFORCA functionary. San José, September.
- Evans, Sterling. 1999. *The Green Republic: A Conservation History of Costa Rica*. Austin: University of Texas Press.
- Friedmann, John, and Haripriya Rangan, eds. 1993. In *Defense of Livelihood: Comparative Studies on Environmental Action*. West Hartford, Conn.: Kumarian Press.
- González, Orlando. 1997. Author interview, July. González was a PUSC deputy on the Agrarian Committee of the National Assembly and heavily involved in the formulation of the forest law.
- Gutiérrez, Rafael. 2000. Greg Basco interview with Gutiérrez, a SINAC functionary. San José, March.
- Hopkins, Jack W. 1995. *Policymaking for Conservation in Latin America*. Westport, Conn.: Praeger.
- International Union for the Conservation of Nature (IUCN). 1980. *World Conservation Strategy*. Washington, D.C.: IUCN.
- IUCN. 2000. *Comunidades y gestión de bosques en Mesoamérica*. San José: Impresión Comercial La Nación.
- Kishor, Nalin, and Luis Constantino. 1993. "Forest Management and Competing Land Uses: An Economic Analysis for Costa Rica." The World Bank Latin America Technical Department Environmental Division, Note No. 7 (October).
- La República*. 1997. "Un repunte de la agroforestería en Centroamérica." October 30: 38
- Lutz, Ernst, Mario Vedova, Héctor Martínez, Lorena San Román, Ricardo Vázquez, Alfredo Aravena, Lucía Marino, Rafael Celis, and Jeroen Huisling. 1993. *Interdisciplinary Fact-finding on Current Deforestation in Costa Rica*. World Bank Environment Working Paper No. 61 (September).
- Madrigal, Patricia, Vivienne Solís Rivera, Ivannia Ayales Cruz, and Marino Marozzi Rojas. 1997. *Uso sostenible de la biodiversidad en Mesoamérica: Hacia la profundización de la democracia*. San José: Programa de Vida Silvestre para Centroamérica, UICN.
- Marín, Martha. 2000. Greg Basco interview with Marín, leader of the Red Costarricense de Reservas Privadas. September.
- Martínez, Leonidas. 1997. Martínez was the Partido Liberación deputy who sponsored the Forest Law Bill in the Figueres administration. Author interview. San José, July.
- Mendoza, Dixie. 1990. "Sala IV anula Ley Forestal." *La Nación*, 25 May, 5A.
- Ministerio del Ambiente y Energía (MINAE). 1997. "El sistema nacional de áreas de conservación

- de Costa Rica: Concepto, funciones y avances en su implementación." Mimeo, May.
- MINAE. 1998a. *Plan Nacional de Desarrollo Forestal: Integración y Participación Activa del Sector Forestal en El Desarrollo Humano Sostenible*. San José: MINAE.
- MINAE. 1998b. Proyecto Ley de Valoración y Retribución por Servicios Ambientales. Asamblea Legislativa, Comisión Permanente de Asuntos Agropecuarios y Recursos Naturales, Expediente 13, 472, 2-13.
- MINAE. 1999a. Ley de Valoración y Retribución por Servicios Ambientales: Dictamen, Afirmativo de Mayoría. Asamblea Legislativa, Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Expediente 13, 472, April 28: 742-754.
- MINAE. 1999b. Propuesta: Texto Sustitutivo de Ley de Valoración y Retribución por Servicios Ambientales. Asamblea Legislativa, Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Expediente 13, 472, February 17: 193-219.
- MINAE. 2000. *Estrategia Nacional de Conservación y Uso Sostenible de la Biodiversidad*. San José: MINAE.
- Ministerio de Recursos Naturales, Energía y Minas (MIRENEM). 1990. Estrategia de conservación para el desarrollo sostenible de Costa Rica. San José: MIRENEM.
- Monge, Rosaura. 2000. Greg Basco interview with Monge, the coordinator of the Natural Resources Department of the Instituto Costarricense de Turismo, August.
- Mora, Jorge. 1999. "El doble discurso ambiental." *Semanario Universidad*, February 17-23: 16.
- National Assembly. 1994. *Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales*. File nos. 11,003, pp. 13-30, 549-69, 727-75; and ledgers nos. 54, August 23; and 56-57, August 24.
- Odio, Elizabeth. 2000. "Política ambiental nacional," *La República*, editorial, March 12.
- Pearce, David W., and R. Kerry Turner. 1990. *Economics of Natural Resources and the Environment*. Baltimore: The Johns Hopkins University Press.
- Peralta, Alfredo. 1993. Author interview, with Peralta, a leader of timber industrialists who became vice president of the Cámara Costarricense Forestal. San José, May.
- Peuker, Axel. 1992. *Public Policies and Deforestation: A Case Study of Costa Rica* World Bank Latin America and the Caribbean Technical Department Environment Division Report No. 14 (February).
- Redclift, Michael. 1992. "Sustainable Development and Popular Participation: A Framework for Analysis." In *Grassroots Environmental Action: People's Participation in Sustainable Development*, eds. D. Ghai and J. Vivian, 23-49. London: Routledge.
- Rivera, Sileny. 1997. "Cambian destino a gravamen de combustibles." *Al Día* May 4: 3.
- Rodríguez, Emel. 1997. Author interview. E. Rodríguez was director of the Área de Conservación Tempisque. San José, July.
- Rodríguez, Jorge. 1997. Author interview. J. Rodríguez is a senior consultant to Central American governments on forestry and was the chair of the Reconciliation Committee. San José, July.
- Salas, José Luis. 1993. Author interview. Salas is the former director of the Tropical Forestry Action Program (TFAP-Costa Rica) San José, May.
- Salazar, Edgar. 1994. Author interview. Salazar was executive director of the Comisión de Desarrollo Forestal de San Carlos (CODEFOR-SA). Ciudad Quesada, February.
- Sánchez, Oscar. 2000. Greg Basco interview with O. Sánchez, a FONAFIFO functionary. San José, September.
- Segura, Olan, Robin Gottfried, Miriam Miranda, and Luis Gómez. 1997. "Políticas Forestales en Costa Rica." In *Políticas forestales en Centroamérica: Análisis de las restricciones para el desarrollo del sector forestal*, eds. Olan Segura, David Kaimowitz, and Jorge Rodríguez. San Salvador: IICA-Holanda.

- Silva, Eduardo. 1997. "The Politics of Sustainable Development: Native Forest Policy in Chile, Venezuela, Costa Rica and Mexico." *Journal of Latin American Studies* 29, 2: 457-493.
- Solís, Magda. 1993. *Junta Nacional Forestal Campesina: Una experiencia de organización campesina*. San José: Junta Nacional Forestal Campesina (JUNAFORCA).
- Solís, Magda. 1995. Author interview. San José, February.
- Tarrow, Sidney. 1994. *Power in Movement*. Cambridge: Cambridge University Press.
- Tarrow, Sidney. 1996. "Social Movements in Contentious Politics: A Review Essay." *American Political Science Review* 90, 4: 874-883.
- Tico Times*. 1999. "Worry Over the Environment Growing." February 5.
- Umaña, Álvaro, and Katrina Brandon. 1992. "Inventing Institutions for Conservation: Lessons from Costa Rica." In *Poverty, Natural Resources and Public Policy in Central America*, ed. Sheldon Annis. Washington, D.C.: Overseas Development Council.
- Vargas, Ronald. 1993. Author interview with the director of the Dirección General Forestal, San José.
- Vega, Luis Felipe. 1999. Hearings of the Comisión Permanente de Asuntos Agropecuarios y de Recursos Naturales, Asamblea Nacional Legislativa, Acta de la Sesión Ordinaria No. 92, January 19.
- Vega, Luis Felipe. 2000. Greg Basco interview with Vega, the chair of the Executive Committee of the Oficina Nacional Forestal and executive director of JUNAFORCA. San José, September.
- World Bank. 1992. *World Development Report 1992: Development and the Environment*. New York: Oxford University Press.
- World Commission on Environment and Development (WCED). 1987. *Our Common Future*. New York: Oxford University Press.