Chapter One

Contested Nature

Conservation and Development at the Turn of the Twenty-first Century

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During the second half of the twentieth century, the world witnessed the emergence of a global environmental movement dedicated, among other things, to curbing unprecedented rates of species loss and habitat destruction. Now at the beginning of the twenty-first century, we still face an alarming downturn in the diversity of life found on the planet in spite of key gains in policy development, political participation, financial support, and program implementation. The need to act decisively and quickly is indisputable. At the same time, it is important to recognize that most areas considered to be high priority biodiversity "hotspots" (Myers 1988) are also social and political "hotbeds." These rural areas in countries such as Colombia, Brazil, Indonesia, Madagascar, Mexico, the Philippines, and the Ivory Coast may feature high levels of poverty, insecure land tenure and landlessness, unstable and/or undemocratic political systems, and histories of state-sponsored repression. While the conservation movement is certainly not responsible for these conditions, individual interventions aimed at nature protection can exacerbate rather than alleviate social justice problems. As mechanisms of resource control, conservation programs tie up natural areas that are highly

sought after by resource-dependent agrarian communities. A number of other groups also have interests in these biologically rich areas including drug cartels, guerrilla factions, pharmaceutical companies, international development banks, the military, tourism agencies, and oil and mining companies to name just a few. Thus, nature is contested on numerous levels under highly complex social and political conditions.

The purpose of this book is to analyze in depth the politicized nature of conservation programs and to explore how local conflict and resistance often develop in response. Even those approaches labeled as "people-oriented" conservation generate complex political relationships and challenges that can frustrate biodiversity protection efforts and detract from sustainable human development. Although practitioners recognize this political complexity, it rarely enters into the problem analyses that inform conservation policy (Blaikie and Jeanrenaud 1996; Ghimire and Pimbert 1997; Peluso and Watts 2001; Zerner 2000). As a result, it is important to study the politics of conservation in order to identify specific factors that tend to aggravate social justice problems and to explore how conflict and resistance hinder the conservation imperative.

This volume is intended as a reader for upper level undergraduates, graduate students, and practitioners who wish to explore these issues—especially those interested in conservation biology, environmental and natural resource sociology, cultural anthropology, human population-environment dynamics, international rural development, and protected area management. It is structured around conceptual chapters and supporting case studies that analyze the politics of conservation in specific contexts. The central theme of the book is that, regardless of approach, conservation interventions transform local and regional political landscapes in complex ways. Whereas numerous analysts argue that parks are "under siege" by an array of social threats, we find that the opposite also holds—rural agrarian communities often experience irreversible social and cultural impacts from conservation programs. Therefore the question arises, how can conservation initiatives operate in ways that ameliorate rather than aggravate social justice problems in these communities? We argue that the conservation with social justice question is primarily a matter of human organization. Therefore, the conservation community's responses to the question posed above will have to focus internally on the fundamental concepts, methods, and modes of organization that govern action. To encourage this process, we present a synthesis of conceptual tools centered on strengthening organizations, crafting institutions for collaboration, and establishing politically constructive social processes; all elements that aid in the formation of social capital. When applied fully, these tools will increase the likelihood that conservation organizations will carry out programs in ways that advance social justice. In general, we hope that this book will incite constructive debates about contem-

porary approaches to biodiversity conservation and their social justice implications as well as generate creative ideas for pursuing the conservation imperative in ways that protect both nature and human dignity.

DOWNWARD TRENDS FOR NATURE AND PEOPLE

By even the most conservative estimates, progressive degeneration of ecosystem structure and function with its associated loss of species is occurring at an alarming rate, stemming from a range of human activities. Most sources point to the increasing number of species extinctions as a clear indication of a biodiversity crisis. Using data from the 1996 IUCN Red List of Threatened Species, Tuxill and Bright (1998, 41) estimate that some one thousand species are lost each year. The 2000 IUCN Red List of Threatened Species suggests that this trend may be worsening. Compared to the 1996 report, this more recent assessment concludes that the number of critically endangered species has increased—mammals from 169 to 180 and birds from 168 to 182. Two key groups—primates and freshwater turtles—suffered sharp downward turns. The number of critically endangered primates has increased from thirteen to nineteen and freshwater turtle species in the same category rose from ten to twenty-four (IUCN 2000:1).[1]

By most accounts, habitat loss and degradation represent the leading threats to species. The 2000 IUCN Red List notes that changes in habitat affected 89 percent of all threatened birds, 83 percent of mammals, and 91 percent of threatened plants that were assessed (IUCN 2000:2). Studies on conversion and reduced quality of forested lands present worrisome trends on habitat loss. While many of the world's temperate forests have been significantly altered over the last two centuries, the last 30–40 years have seen major changes in the amount and quality of tropical forests. Estimates suggest that one-fifth of all tropical forest cover was lost between 1960 and 1990. In terms of forest quality, both timber harvesting and atmospheric pollution continue to affect forest cover, species composition, and age stratification (Abramovitz 1998, 22–23). Recognizing the rate and extent of species decline, ecologists including Norman Myers have identified twenty-five biodiversity "hotspots" that may house as much as 44 percent of vascular plants and 35 percent of all species in four vertebrate groups, covering just 1.4 percent of the earth's surface (Myers et al. 2000). Given this concentration of biodiversity in such a small area, conservation planners propose that "hotspots" should receive highest priority for species protection efforts.

In addition to the disturbing ecological trends described above, the majority of developing countries in tropical regions face significant social, economic, and political challenges that complicate both nature protection initiatives and the ideal of social justice. Several gross indicators for countries

where biodiversity "hotspots" occur suggest that adult mortality prior to age forty, adult illiteracy, population without access to basic services, and income distribution vary by region (Table 1.1). Countries such as Madagascar and Ivory Coast in the Africa region present higher levels of adult mortality prior to age forty, adult illiteracy, and population without access to basic services compared to countries in Southeast Asia and Latin America. One can also discern differences within regions. For example, within Southeast Asia, Indonesia faces more acute development challenges according to the indicators shown in Table 1.1 compared to the Philippines. In the case of Latin America, Colombia and Mexico show percentages on par with the Philippines while Brazil is comparable to Indonesia. The Latin American countries stand out for their highly unequal income distribution compared to the other countries. Brazil in particular features an income distribution ratio that is more than twice as high as Madagascar and more than four times greater than Ivory Coast. It is important to recognize also that all of the countries shown in Table 1.1 currently face some level of violent unrest that offers stiff challenges to stable governance.

In addition to the political and social indicators mentioned above, global population dynamics present some important trends. According to recent estimates, in 1999, the world became home to six billion people. By the year 2050, this number is expected to increase by nearly one-third to almost nine billion. Available data suggest that 90 percent of these new people, some 2.7 billion, will be living in the world's poorest regions where the greatest indices of biodiversity are found (United Nations 1998).

While the biodiversity "hotspot" countries mentioned above show high population growth and fertility rates, trends suggest that these numbers are decreasing (Table 1.2). Perhaps the most pressing threat to biodiversity and communities related to population dynamics is large-scale, uncontrolled migration. Homer-Dixon (1999) presents a model that suggests how resource scarcity is linked to unplanned migration, ecological degradation, and violence. He estimates, for example, that land scarcity has strongly contributed to the migration of twelve to seventeen million people from Bangladesh to northeastern India. Similarly, Brechin et al. (1993) note how government transmigration programs in the Indonesian province of South Sumatra led to the massive relocation of some 296,775 people between 1980 and 1987. They indicate that many of these migrants were forced to invade protected forests for lack of other alternatives. Case studies from Guatemala, Ecuador, Indonesia, and Sudan document environmental impacts from migration including deforestation, soil erosion, and desertification (Bilsborrow 1992). Refugee populations fleeing war, ethnic violence, and political instability have had heavy impacts on protected areas (McNeely and Ness 1996).

The sources mentioned above suggest that social injustice related to political and economic factors such as unequal income and land distribution, forced

relocation, and rural violence lead to environmental degradation. At the same time, several cases indicate that conservation programs generate complex, often irreversible, negative social impacts. Ghimire and Pimbert (1997, 7), for example, refer to a 1993 study stating that some 600,000 tribal peoples had been displaced in India (20 percent of the country's total tribal population) as a result of protected area establishment and management. Similarly, Geisler (chapter 13) documents social impacts that resulted from the forced relocation of rural communities resulting from the expansion of Los Haitises National Park in the Dominican Republic. In other cases, press reports suggest that conservation activities have served, in part, as a front for authoritarian measures aimed at controlling strategic rural areas. In Burma, available information points to links between the military and conservation groups in creating the Myinmoletkat Nature Reserve, a move that apparently has served to protect the interests of transnational oil companies (Associated Press 1997; Faulder 1997; Levy and Scott-Clark 1997). More subtle negative social impacts stem from restrictions placed on community resource access and use. These state-mandated controls are typically viewed as arbitrary and illegitimate by affected rural communities and thus produce a range of violent and nonviolent reactions (Bryant 1997; Ghimire and Pimbert 1997; Neumann 1998; Peluso 1992).

THE EVOLUTION OF PROTECTED AREAS MANAGEMENT APPROACHES

While national parks were still an oddity in most countries at the turn of the twentieth century, by 1998, approximately 6.8 percent of the world's land area (854.2 million hectares) was listed in one of the World Conservation Union's (IUCN) protected area categories sanctioning limited, if any, human use (these include IUCN categories I–IV, which account for 64.8 percent of all protected areas). If all IUCN protected areas are taken into account (categories I–VI), this figure increases to 10.2 percent or 1,327 billion hectares globally (Cox 2001).[2]

National Parks and Resource Control

Although protected areas play a fundamental role in maintaining biological diversity and ecological integrity, their creation and management tend to reflect the political environment in which they are embedded. We find that the history of nature protection and parks often emerges out of colonial and authoritarian rule as instruments of natural resources control (Guha 1997; Marks 1984; West and Brechin 1991). Rather than assigning blame, this understanding of conservation's past helps to explain why local resistance and skepticism of national parks remain close to the surface in most areas around the world.

TABLE 1.1
Human Poverty Indicators for Selected Biodiversity "Hotspot" Countries

Country	*Adults not surviving to age 40 (%) [1998]*	*Adult Illiteracy (%) [1998]*	*Population w/o access to basic services (%) [1998]*			*Income distribution (%) [1987–98]*		
			Safe Water	*Health Services*	*Sanitation*	*Richest 20%*	*Poorest 20%*	*Ratio Rich:Poor*
Madagascar	21.8	35.1	32	—	—	5.1	52.1	10.2:1
Ivory Coast	37.0	55.5	58	40	61	7.1	44.3	6.2:1
Indonesia	12.3	14.3	26	57	47	8.0	44.9	5.6:1
Philippines	8.9	5.2	15	—	13	5.4	52.3	9.7:1
Colombia	9.8	8.8	15	13	15	3.0	60.9	20.3:1
Brazil	11.3	15.5	24	—	30	2.5	63.8	25.5:1
Mexico	8.2	9.2	15	9	28	3.6	58.2	16.2:1

Source: (UNDP 2000)

TABLE 1.2
Demographic Trends for Selected Biodiversity "Hotspot" Countries

	Pop. (million)	*Annual Growth Rate (%)*		*Urban pop. (%)*	*Pop 65+ (%)*	*Total Fertility Rate (%)*	
Country	*1998*	*1975–1998*	*1998–2015*	*1998*	*1998*	*1970–1975*	*1995–2000*
Madagascar	15.1	2.9	2.6	28.3	2.9	6.6	5.4
Ivory Coast	14.3	3.3	2.0	45.3	2.5	7.0	5.6
Indonesia	206.3	1.8	1.1	38.3	4.5	5.1	2.6
Philippines	72.9	2.3	1.7	56.9	3.5	5.5	3.6
Colombia	40.8	2.1	1.6	74.1	4.6	5.0	2.8
Brazil	165.9	1.9	1.1	80.2	4.9	4.7	2.3
Mexico	95.8	2.1	1.3	74.0	4.5	6.5	2.8

Source: (UNDP 2000, United Nations 1998)

As numerous observers have noted, rigid restrictions on human settlement and resource use stipulated under the most commonly applied protected area categories have generated numerous resource access and use conflicts in "developing" countries with sizable rural populations. Historically, protected area designations frequently occurred via authoritarian policies in which rural communities were forced off their lands and denied access to resources essential to their economic and cultural well-being with minimal consultation or compensation (Ghimire and Pimbert 1997; Hough 1989; West and Brechin 1991). For example, numerous parks in East Africa and Southeast Asia were set up in the late nineteenth and early twentieth centuries as game and recreation parks for ruling elites (Grove 1990; MacKenzie 1988). In sum, early approaches to nature protection were largely advanced and controlled by elites and treated local people as the main threats to high priority natural areas rich in biological diversity.

Despite major advances in reducing the social impacts of establishing protected areas, governments and international conservation organizations continue to create new parks by less than democratic means. For example, in 1989 the Mexican government established the Calakmul Biosphere Reserve in the southeastern state of Campeche without consulting local communities, some of which were located within the newly gazetted protected area. While politically expedient, the creation of the reserve greatly altered local power relationships and increased levels of conflict. Community members claimed they knew nothing about the reserve until a year after it was decreed when researchers began performing ecological studies. Faced with land-use restrictions, farmers adopted a militant attitude, threatening to kill anyone claiming to be an "ecologist." In the end, the government and local communities achieved a political détente but management activities have been very limited due, in part, to local resistance to conservation programs (Haenn 1997). Similar stories emerge from countries throughout the developing world.

Community-Based Conservation and Local Participation

The 1982 World Congress on Parks and Protected Areas marked a turning point in conservation practices by encouraging approaches that promoted greater local participation and sustainable use of resources (McNeely and Miller 1984). Since the early 1990s these "people-oriented" strategies have been organized under the rubrics of community-based conservation (CBC) and integrated conservation and development projects (ICDPs). The logic governing this approach suggested that if local people had a stake in management and their livelihoods were somehow linked to conservation, then they would support and comply with protected areas management restrictions. Ideally, these incentives would translate into decreases in park boundary encroachment and illegal poaching. Based on this reasoning, large-scale envi-

ronmental protection programs began promoting conservation with development. Numerous projects focused on multiple strategies such as compensation for denied access to resources in the form of park employment, social services, fuelwood plantations, and marketing assistance (Furze et al. 1996; Wells and Brandon 1992; Western et al. 1994). Following the biosphere reserve approach, protected areas were conceptualized as comprising different zones, including a "buffer zone" housing "sustainable use" projects with local communities (Batisse 1982).

In recent years, the community-based approach has come under attack with respect to both its underlying assumptions and performance record. In particular, critics argue that while communities have received economic benefits from projects, the integrated approach has not strengthened protection of biological diversity. They suggest that by focusing the bulk of resources and attention on small numbers of communities in and around protected areas, community-based projects tend to create mini development poles that in some cases vastly increase local populations and resource use demands. At the same time, emphasis on individual protected areas and buffer zones means that regional ecological corridors and broader political and economic forces have been left largely unattended (Brandon et al. 1998; Kramer et al. 1997).

Numerous studies have critically examined ICDPs and related approaches to better understand their underlying assumptions and implementation shortfalls (Brandon 1997). One line of research, for example, examines the diversity encased in the term *community* (Agrawal and Gibson 1999, chapter 6). The success rate among community-based and integrated conservation and development projects varies (Larson et al. 1997; Wells and Brandon 1992). In many cases, projects have been hampered by a combination of poor design, inefficient implementation, weak local participation, institutional changes, and regional political dynamics. Recent studies on ICDPs in Indonesia (Wells et al. 1999) and community-based conservation in Nepal and Kenya (Kellert et al. 2000) conclude that interventions in these countries do not offer biodiversity protection at a sufficient scale or degree to guarantee species survival. Numerous community-based projects, however, have emerged as qualified successes in terms of strengthening local institutions and reducing destructive land use (Galletti 1998; Western et al. 1994, chapter 14).

The Regional Approach to Conservation

From an ecological point of view, protection of ecosystem structure and function will best be achieved at the eco-regional or landscape level (Dinerstein et al. 1995). The overarching logic of this approach suggests that conservation programs should focus at the regional level rather than individual protected areas and their buffer zones. This shift in scale was produced by the realization that parks as islands are insufficient to guarantee the long-term survival

of many species, especially large mammals. In addition, analysts have argued that the most serious threats to biodiversity come from macro-level sources such as national and international policies (Kramer et al. 1997). As Gezon notes with respect to the latest phase of conservation planning in northern Madagascar (chapter 11), the eco-regional approach makes sense from an ecological perspective but produces stiff organizational challenges and largely precludes local participation in decision making.

Conservation Through Private Acquisition

A fourth approach to conservation, which has received less attention than the first three strategies, entails private acquisition of land for nature protection (chapter 8). Although this type of intervention is gaining in popularity among conservation planners, it has not been widely studied. In Belize, for example, a number of factors allowed the NGO Programme for Belize to become the owner of the Rio Bravo Conservation and Management Area in 1989, a reserve which covers 92,614 hectares (228,800 acres or 4 percent of Belize's terrestrial area). Compared to state-run protected areas, co-management arrangements, or community concessions, private ownership in the Rio Bravo case generated clear and largely uncontested tenure and management rights. Programme for Belize owns the reserve in trust for the Belizean people and thus enjoys tax-exempt status (Wallace and Naughton-Treves 1998). In this regard, then, private acquisition appears to have worked well in the Rio Bravo case given low population density and undisputed property rights.

In contrast, South Africa presents examples where the creation of private game reserves has been used as a political strategy to thwart land reform in the post-Apartheid era. Evidence suggests that numerous white landowners changed the legal status of their farms and ranches to private game reserves, which are exempt from land reform under South African law. This shift in status effectively nullified land claims made by black smallholder farmers seeking to establish homesteads (Brinkate 1996).

Conservation as Politics

It is important to note that, while we present these four conservation strategies chronologically, they can and do coexist in conservation policy circles. At the same time, however, certain approaches receive greater financial, political, and technical support depending largely on their perceived effectiveness at maintaining biological diversity. Given that conservation programs do not take place in a social and political vacuum, we set out in this book to explore the complex human dimensions that govern protected areas management. More than a response to ecological complexity, "on-the-ground" conservation programs comprise reactions to social complexity where decision making is dominated by politics.

While attempting to make policy adjustments for greater ecological protection, shifts in conservation approaches have only partially responded to the political dynamics that typically determine program success or failure. As we noted above, whereas the community-based approach dedicated too little attention to regional politics, the regional approach appears to slight the local organizational dynamics that are the focus of most ICDPs and community-based conservation projects. Thus, in this book, we propose to more fully analyze the politics of conservation in order to offer recommendations for a more balanced approach that maximizes both biodiversity protection and social justice.

THE CHALLENGES OF JOINING CONSERVATION AND SOCIAL JUSTICE

While most conservation practitioners promote the ideals of conservation and sustainable development, the daunting ecological, social, and political challenges facing both of these areas have left many wondering if it is practical to combine such a broad policy agenda (Brandon et al. 1998; Kramer et al. 1997). The approximately fifteen years of experience from attempts at combining nature protection and sustainable development have generated numerous human organizational challenges that deserve continued examination in order to further strengthen international biodiversity conservation policy. While framed in terms of conservation and sustainable development, these challenges pertain to all of the conservation approaches described above. They include social scientific uncertainty, low organizational capacity, rapid institutional change, weak local participation, and contravening understandings of nature and conservation.

Social Scientific Uncertainty

While those working in conservation biology and ecosystem management point to a significant degree of scientific uncertainty regarding ecosystem dynamics and associated human impacts, social scientists from a variety of disciplines face immense challenges in predicting the social impacts related to conservation interventions (chapter 13). Interestingly, both ecological and social scientific uncertainty dictate more restrictive, cautionary approaches, albeit with quite different results. Whereas "erring on the side of caution" in ecological terms would suggest maximizing protection of high priority areas with a minimum of human interference, strategies for reducing social impacts from nature protection might translate into foregoing potentially socially disruptive conservation interventions. We will return to this apparent dilemma at the end of this chapter.

Low Organizational Capacity

Regarding organizational factors, the most salient challenges center on questions of organizational structure and capacity. We find that a complex array of organizations participate in biodiversity conservation arenas including local agrarian associations, regional NGOs, international NGOs, state agencies, multilateral development banks, and international aid organizations, to name some of the most prominent examples. Although each of these organizations has an important role to play in conservation, they feature distinct structures, behavior, and even "cultures" that often clash in the context of a particular project. Organizations also feature different operational capacities based on the quality and quantity of resources they have at their disposal. Governmental natural resource management agencies, for example, often lack political power, administrative and technical means, and effective governance systems to both maintain protected areas and work with local communities. These conditions tend to engender partial or ineffective program implementation and at the very least make interorganizational collaboration difficult. We discuss organizational issues in greater detail in chapter 10.

Rapid Institutional Change

All organizations and conservation programs are embedded within an institutional environment, which comprises the broad array of formal and informal rules that govern action. Institutional "environments" typically manifest themselves as laws, policies, and programs, which in many nations tend toward political instability, frequent change, and unequal access to resources. These regional governmental programs, national rural development policies, constitutional amendments, and other institutional factors, in turn, shape local/regional decision making regarding land use. Thus, political processes far removed from rural areas where conservation programs take place often help produce barriers to both biodiversity protection and community development. The well-cited, now historical case of economic subsidies for cattle ranchers in Brazil offers an excellent example of this process.

Beginning in the mid-1960s, the Brazilian government established a wide range of subsidies to encourage large-scale investment in the Amazon region as part of a national development program. Under the program, a regional development agency operated by the federal government doled out projects to investors. As an incentive, these individuals and firms became exempt from paying federal taxes and received a three dollar rebate for every dollar invested from their tax liability. The subsidy program created a highly attractive investment arena in a place where development was otherwise a losing proposition. The regional development agency strongly encouraged development of large cattle ranches, which generated unprecedented rates of deforestation (Moran 1993).

Weak Local Participation

Closely linked to the organizational and institutional challenges mentioned above is the difficulty in generating strong local participation in conservation and development activities. Whereas organizational and institutional issues relate to the *structure* of biodiversity conservation interventions, the notion of participation focuses on the programs' decision-making *processes*. Studies of integrated conservation and development projects (ICDPs) note low levels of local participation (Wells and Brandon 1992). Common barriers to local participation include divergent goals among groups, knowledge differences, histories of domination, class, ethnic, and status differences (Wilshusen 2000). At the same time, examples suggest that local people can participate effectively in projects when outside groups work with communities from the outset, encourage local organizations, and develop regional support networks (Pimbert and Pretty 1995, chapter 5).

Contravening Understandings of Nature and Conservation

Underlying our approaches to biodiversity conservation is the manner in which different groups understand and define the task or problem of biodiversity conservation. Most observers ranging from farmers to conservation biologists agree that natural systems are being degraded and species lost. However, this wide spectrum of players presents very different ways of thinking and talking about nature that typically produce divergent conclusions about how to protect biological diversity. These divergent conclusions can represent opposing opinions, which draw on contravening empirical evidence and moral arguments. Within the scope of biodiversity conservation, for example, we often find conflicting logics about the role of humans with respect to protected areas. One view promotes preserving representative portions of our world's ecosystems free of human interference while another perspective sees sustainable use and controlled settlement as a more equitable way of maintaining ecologically valuable landscapes. While these two views are by no means mutually exclusive, they do mark a key philosophical separation regarding the relationship between humans and the natural world. As a result, conceptual differences among groups create tensions that impede concerted action on the ground. Moreover, as several of the chapters in this book illustrate, the challenge of problem definition extends well beyond the question of competing policy paradigms to encompass the different ways that diverse cultural groups understand and explain the relationship between humans and nature (chapters 3 and 5).

These and other challenges make any attempt at joining biodiversity conservation and social justice a very complex undertaking. At the same time, the urgency of both the biodiversity and social justice crises around the world increases the need to act quickly. Limitations in funding, organizational

capacity, and political support make it necessary to focus our conservation efforts. Why, then, is it so important to pursue the complex task of pursuing conservation with social justice given all of these factors?

THE RATIONALE FOR BIODIVERSITY CONSERVATION WITH SOCIAL JUSTICE

The most commonly cited rationales for protecting biological diversity constitute a combination of practical and moral arguments. The pragmatic conclusions forwarded in the 1992 Global Biodiversity Strategy, for example, point out that healthy and diverse ecosystems potentially offer highly marketable goods such as new pharmaceuticals, genetic banks for key agricultural crops, and ecological services such as flood control (WRI et al. 1992). In addition to these utilitarian reasons, many scholars argue that wilderness should be preserved as a social good in and of itself (Norton 1992).

We concur with the reasons for conserving biodiversity summarized above but would stress that, since conservation, by definition, requires restraint by resource users, biodiversity protection will only take place through human institutions such as laws, organizations, or cultural practices that control our behavior. While obvious, this point leads to a series of other important conclusions. The behavioral restraint implied by conservation can occur voluntarily or be imposed by outside forces. In practice, social control typically occurs through a combination of self and externally imposed enforcement. The key underlying concept in both cases is legitimacy. Legitimacy refers to any behavior or set of circumstances that society defines as just, correct, or appropriate. This logic by no means precludes enforcement but since "legitimacy" is socially defined, divergent beliefs about what constitutes a legitimate act are most likely to generate tension and conflict when they interface in the same political arena. For example, a group may follow customary practices codified in complex traditional institutional arrangements that govern resource use such as water for irrigation or fuelwood collection. Modern legal institutions that govern protected area management may include regulations that contravene these customary use practices. In the absence of concerted negotiation, enforcement of protected area regulations in such a situation might be viewed as illegitimate by local resource users. The result would most likely be noncompliance with the law (chapter 4). The line between legitimate enforcement and illegitimate coercion is often unclear. Since conservation and other agencies will likely never have enough resources to universally enforce the law and since confusion over the legitimacy of enforcement acts at times creates conflict, a more practical, long-term approach would be to negotiate agreements that participants view as legitimate and feasible. Since even the most well-intentioned intervention is

to some degree an imposition of knowledge and practices, one means of reversing associated patterns of domination is to help construct authority (defined as "legitimate power") at all levels (Wilshusen et al. 2002). Concerted negotiation may not be feasible in all situations, such as when local representatives are unwilling or unable to participate.

In addition to this pragmatic argument, there are important moral reasons for elevating the importance of social justice within conservation policy thinking. If we accept that conservation is as much a question of human organizational process as it is ecological processes, then it becomes necessary to establish explicit moral parameters or boundaries for social responsibility. Such guidance would parallel the moral arguments in favor of biodiversity protection advanced by numerous conservation advocates. Beyond principles of basic human rights, which should guide all human action, probably the strongest direction in this regard emerges in discussions of justice. As we discussed above, what is considered as just by a given group constitutes the core of our definition of "legitimacy."

The notion of social justice that we propose is built on the right to self-determination, a principle that guides most international initiatives concerned with securing human rights for all people. By this we mean the right to participate at all levels of the policy-making process as equal partners, the right to self-representation and autonomy, and the right to choose one's political, economic, and cultural systems. These rights imply responsibilities entailing politically constructive participation. However, attempting to define these terms beyond specific cultural and social contexts risks imposing knowledge constructs incongruent with local understandings, practices, needs, and desires. At the same time, purely local definitions of justice may be too parochial to garner wide support from enough groups to allow large-scale collective action. One option is to undertake concerted dialogue and negotiation in the context of a specific intervention to shape mutually agreeable courses of action for both conservation and human dignity. Although it implies significant "start-up costs," this type of deliberative approach appears to have the greatest potential of generating a legitimate process that can account for social differences as well as changing ecological and political circumstances. It promotes constructive debate, compromise, and power sharing over the long term as opposed to intractable conflict and domination.

The ideal of social justice appears in numerous discussions on sustainable development usually in the form of policy statements calling for a combination of economic growth, social equity, and environmental protection (WCED 1987). These formulations are often too general to provide meaningful guidance for local application and do not consider the inherent political tensions among the three objectives (Silva 1994). In contrast, other observers suggest that groups must negotiate the meaning of sustainable

development for each context in order to attend to diverse and often conflicting interests (Lelé 1991). At the heart of these calls for negotiating the "details" of sustainable development lies the question of governance. Governance in this case refers simply to arrangements for decision making and power sharing.

Thus, like the term *legitimacy,* the idea of "social justice" takes on tangible meaning in a particular context. This assertion has important implications in that it points to the conundrum of localism, which holds that justice is defined locally through customary or national laws and practices. While local traditions are fundamental components for delineating the boundaries of social justice contextually, local political actors potentially can manipulate them in the absence of checks and balances. For example, local community leaders may use social justice arguments to prevent the creation of a wildlife sanctuary to protect personal economic interests related to a mining concession with an independent contractor. Similarly, advocates of a protected area may claim that their plans to relocate surrounding communities are legitimate because they do not violate national laws. When confronted with the problem of localism, dialogue and consensus on transnational or transcultural referents for justice, even in general terms such as the 1948 Universal Declaration of Human Rights or the principles of Environmental Justice (Taylor 2000), provide some broad-based criteria for making judgments on questions of social justice.

In the end, both the pragmatic and moral positions focusing on legitimacy and social justice revert back to the ideal of self-determination for all participants, but particularly for those rural communities that depend on local natural resources. In other words, we must ask ourselves the fundamental questions: Who decides how biodiversity conservation will occur and at what social cost? and, Who benefits from biodiversity conservation? Our analysis in this book suggests that local resentment and resistance to protected areas will increase to the extent that conservation interventions marginalize those communities that live in greatest proximity to and often have the strongest dependence on and attachment to key ecologically valuable areas.

At the same time, conservationists have a special social responsibility to work in ways that promote increased social welfare in resource-dependent communities. Some recent analyses suggest that protected area programs cannot and should not assume responsibility for all aspects of social development at the community level (Brandon et al. 1998). While this is true to a certain point, we must also recognize that in most rural areas, outside projects significantly alter the local political landscape. In order to increase the chances of success and maintain a strong moral foundation, members of the conservation community must take responsibility for their actions and introduce mechanisms that can encourage greater social justice.

OVERVIEW OF THE BOOK

In the remainder of this chapter we present an overview of the book, which grapples with this immense challenge of how to pursue biodiversity conservation with social justice. In this sense, it comprises both an analysis of the political dynamics of conservation and an exploration of possibilities for strengthening human organizational capacity. Since conservation programs inevitably transform local and regional political landscapes in "developing" countries, adoption of the politically constructive approach that we propose will allow participants to work in ways that advance rather than detract from nature protection and the ideal of social justice.

The Contested Nature of Nature

The contested nature of nature manifests itself in complex ways. Since conservation interventions are highly "charged" politically, the analytical task of understanding conflict and resistance associated with protected areas management must focus on the actions of and outcomes produced by the diverse array of players that work to maintain the ecological integrity of the world's biologically rich areas (Wilshusen et al. 2002). Whereas the different conservation approaches summarized above—strict preservation, integrated conservation/development, regional landscape ecology, and private acquisition—represent a range of strategies for safeguarding biological diversity, many of the actors involved and political processes are the same regardless of approach. As a result we can explore the different ways that political actors interact in the context of specific projects and identify several factors related to human organization that tend to impede biodiversity conservation efforts and work against agrarian communities' opportunities for achieving social justice.

By presenting a range of cases on the politics of conservation, we uncover the enormous social diversity encased in the term *local people* and suggest how the impacts of conservation programs favor some groups but more often dispossess others that depend most on access to and use of local natural resources. We deliberately chose the term *dispossessed* to convey several aspects of the inevitable social impacts that accompany conservation programs such as the establishment and management of protected areas. Again, rather than trying to assign blame, we focus on the dispossessed to show how conservation interventions tend to differentially disenfranchise groups in complex ways. The verb *dispossess* suggests that certain groups lose something valuable against their will. In extreme cases, as Geisler describes in chapter 13, protected area management programs forcibly remove long-term residents from their lands, creating "protected area refugees" in the process. In less extreme instances, conservation initiatives typically impose restrictions on access and use of local natural resources. Under such circumstances, agrarian communities often lose control

over land but also may experience irreversible social and even emotional impacts associated with forced changes to long-standing cultural practices.

The first section of the book, "Politics, Power, and Social Justice in Biodiversity Conservation," analyzes the complex ways in which conservation interventions transform rural agrarian political landscapes. In this sense, it explores the types of social impacts that biodiversity projects occasion in rural communities as well as the power dynamics produced in the process. In chapter 2, Fortwangler explores human rights and social justice concerns associated with conservation practices past and present and traces the movement toward socially just protected area conservation. She provides a review of protected area-local people relationships that spans a range of practices and raises questions that promise to challenge us into the future.

In order to better understand the complex matrix of political relationships that underlie the conservation process, Wilshusen (chapter 3) offers a wide-ranging exploration of power in practice. Many scholars define power as the ability of one party to impose its will upon another despite resistance. He builds upon these understandings by exploring how organizations, laws, rules, language, everyday cultural practices, and other so-called "social structures" produce power effects by enabling some groups to achieve their desired goals while constraining others in the pursuit of theirs. He finds that local conflict and resistance associated with biodiversity protection initiatives surface not only as a result of conflicting interests but also when contravening institutional and cultural practices interface in the same political arena.

The case studies in this part of the book illustrate the different manifestations of power dynamics associated with conservation programs from a number of angles. In chapter 6, for example, Belsky provides a detailed analysis of the complex political and social divisions masked by the term *local community*. In her study of community-based ecotourism in Belize, she finds that the intersection of social factors such as gender, class, and political party affiliation divided community members and largely produced a progressive deterioration of efforts to join conservation and sustainable development.

In contrast, chapter 4, by Brechin, and chapter 7, by West et al., focus on institutionally based power by examining the ways in which national-level institutions and political action impacted local projects to develop protected areas in South Sumatra, Indonesia, and village-level ecotourism in northern Benin respectively. In the case of South Sumatra, Brechin suggests how modern laws for nature protection clashed with locally recognized customary law regarding access and use of natural resources during the 1980s. The contradictions between modern and customary institutions created ambiguities regarding the legitimacy of entering the forest and using its products in the context of regularly shifting protected area boundaries. The chapter on ecotourism in Benin illustrates how political maneuvering between an international tour operator and the government's tourism min-

istry allowed outside interests to secure relevant permits and thus prevent community-level actors from pursuing competing enterprises.

Chapter 5, by Wilshusen, in turn, explores how national level institutional change and the emergence of a broad-based social movement among black and indigenous communities facilitated new organizational approaches to biodiversity conservation in Colombia's Pacific Coastal region. In this case, participants took advantage of political opportunities to negotiate the direction of a regional conservation project, challenging the boundaries of conventional understandings regarding the relationship between humans and nature in the process.

The last two chapters of Part One explore the social and political issues surrounding private sector involvement in biodiversity conservation. In chapter 8, Langholz explores the perils and promises of privately owned protected areas from a number of perspectives, including social justice. In chapter 9, Dorsey explores the complex world of bioprospecting, the search for profitable chemical agents. Focusing on Ecuador, Dorsey argues that power differences and profit motives are too great to easily produce win-win scenarios for all involved, where the "losers" are typically local communities, national governments, and nature.

Conceptual Tools for Pursuing Biodiversity Conservation with Social Justice

Whereas Part One of the book analyzes the political dynamics associated with biodiversity conservation interventions, Part Two presents a set of conceptual tools and approaches for increasing human organizational capacity. The concepts that we present center on organizational design, performance, and learning; institutional design for collaboration; and deliberative decision making through dialogue and negotiation.

Like a myriad of other collective action problems, the biodiversity conservation objective is generally pursued through organizations and institutions. As we discussed above regarding the challenges of linking conservation and development, organizations are key actors in the process but they develop their own cultures and possess inherent weaknesses that define and limit their goals, strategies and performance. In Chapter 10, Brechin, Wilshusen, and Benjamin further explore these questions of organizational structure and behavior. They explore how to design and maintain organizational and institutional arrangements that are best tailored to the biodiversity conservation task. Among other things, Gezon's analysis of eco-regional conservation programs in Madagascar (chapter 11) illustrates both the organizational failings of past approaches and the persistent challenge of interorganizational collaboration in the context of current policies. Chapter 12, by Wilshusen and Murguía, presents a case study of a grassroots NGO network in Mexico's Yucatán Peninsula that has successfully established collaborative

institutional arrangements for promoting community-based conservation and development at the regional level.

The concepts of learning and adaptation are central to the organizational and decision-making processes presented in this book. Whether framed in terms of organizational learning, social learning, or adaptive management, we emphasize the importance of constant evaluation and self-correction. This theme emerges in particular in Geisler's review of collaborative-adaptive assessment (chapter 13). Using the case of Los Haitises National Park in the Dominican Republic, Geisler outlines how the principles of learning, which are central to adaptive management, can be combined with participatory methods to reduce social impacts associated with protected area establishment and management. Christie et al.'s case study on collaborative, community-based coastal zone management in the Philippines (chapter 14) suggests that participatory approaches can successfully lead to improved ecological and social conditions.

CONSERVATION AT THE CROSSROADS

The conservation community stands at an important crossroads. Its members have tried different strategies, secured generous project funding, and made important conservation advancements. Yet it still has much to learn regarding the human organizational factors that largely determine the success or failure of biodiversity conservation endeavors. If the biodiversity conservation problem is largely a matter of human organization then our search for responses needs to focus internally not externally. This assertion points to the fact that conservation programs have yet to fully take advantage of a wealth of social theory and applied studies from disciplines such as anthropology, geography, and sociology.

By focusing problem-solving efforts internally to look at the concepts, methods, strategies, and modes of organizing, conservation practitioners and other interested parties can comprehensively consider how to continually adapt approaches to local circumstances and work in ways that advance rather than detract from the ideal of human dignity. Such a process will provide effective policy alternatives to the extent that it is grounded in contextual problem analysis. Further, concentrating on conservation as social and political process allows advocates of both nature protection and social justice to move beyond competing paradigms or approaches and constructively negotiate actions that respond to local desires, needs, and complexities (Brechin et al. 2002).

Earlier in this chapter we pointed to an apparent contradiction between the goals of maximizing biodiversity conservation and minimizing negative social impacts. Whereas maximizing biodiversity protection suggests mini-

mizing human interference, reducing social impacts related to conservation programs would translate into forgoing potentially disruptive interventions of this kind. In practice, however, biodiversity conservation need not produce "zero-sum" outcomes where one objective is favored at the other's expense. At the same time we do not mean to imply that clear "win-win" scenarios will automatically emerge from conservation projects that incorporate social justice criteria. The key is ongoing dialogue and compromise (Lee 1993).

Our discussion in this chapter suggests that the only sound course is for the conservation community to work constructively with people at all levels, as difficult and imperfect as that may be. To proceed in this fashion will require that conservationists adopt a stance of open dialogue and concerted negotiation with a wide array of actors in diverse contexts ranging from rural villagers to government officials to international lending institutions. The notion of social justice carries a connotation of rights, which, as we have proposed, center on the principle of self-determination. It is important to remember that rights imply significant responsibilities for generating workable compromises that advance the nature protection imperative. Indeed, one of the main advantages of reorienting the social processes associated with conservation to incorporate social justice is that the agreements produced by dialogue carry greater legitimacy. At the same time, they offer a stronger practical and moral foundation for fair enforcement. Conversely, agreements that result primarily from force or domination tend to include contravening claims, minimal commitment, and enforcement that many times engenders intractable conflict.

Given the reasoning for explicitly joining conservation with social justice as we have discussed in this introductory chapter, one important question remains: What happens in "emergency situations" where the conversion of specific tracts of tropical forest or other habitats is happening so rapidly as to require tough decisions and immediate action? We certainly do not want to end up talking about protecting nature while the forest burns down around us. The "triage" approach being pursued by several conservation organizations to save ailing biodiversity hotspots (Dalton 2000) suggests that rapid response "emergency rooms" need to be the policy norm rather than the exception. For example, a proposed $150 million Critical Ecosystem Partnership Fund that emerged in 2002 out of a joint effort led by Conservation International, a Washington, DC-based NGO, promised to strengthen management of key protected areas for ecosystems in Madagascar, West Africa, and the tropical Andes of South America. It remains unclear, however, what types of protection strategies this initiative will pursue and how it will work with people living in these areas. In most cases when a government declares a "state of emergency," it suspends the civil liberties of its citizens until the threat to national order has been controlled. In hospital emergency rooms, highly qualified, well-equipped medical teams take all necessary steps to save patients that often arrive in critical condition. Both examples are analogous to proposals for

protecting biodiversity advanced in recent literature on protected areas, but with one crucial difference. Governments that declare states of emergency or physicians that provide emergency medical services must ultimately respond to the citizens or patients they serve.

In contrast, it is unclear what degree of responsibility the international conservation community has to the broad array of groups that are impacted and served by biodiversity protection interventions. Consensus on the question of whom the conservation community ultimately serves has yet to be fully articulated and acted upon. Platitudes focused on the global community's needs are laudable but incomplete. The real test of biodiversity protection's future rests on the degree of legitimacy that the conservation imperative will take on for all impacted groups, but in particular those resource-dependent populations whose livelihoods and oftentimes survival depend upon nature's vitality. These groups—the world's dispossessed—remain a critical element to defining conservation success.

NOTES

1. Under the IUCN Red List system, scientists classify species into one of eight categories: extinct, extinct in the wild, critically endangered, endangered, vulnerable, lower risk, data deficient, and not evaluated. A total of 18,276 species and subspecies are included in the 2000 Red List. The list includes 5,611 species of threatened plants, many of which are trees. The total number of globally threatened plant species is still small compared to the total number of plant species due to the fact that most plant species have yet to be assessed for their level of threat (IUCN 2000).

2. IUCN's Protected Area Categories: Category I, Strict Nature Reserve/Wilderness Area; Category II, National Park; Category III, National Monument; Category IV, Habitat/Species Management Area; Category V, Protected Landscape/Seascape; Category VI, Managed Resource Protected Area (McNeely et al. 1994).