DILEMMAS FOR CONSERVATION IN THE BRAZILIAN AMAZON

By Margaret E. Keck

Abstract

More than a decade after images of flames devouring the rainforest focused international attention on the Brazilian Amazon, the fires continue to burn. This article traces the history of conservation efforts in the Brazilian Amazon and then argues that repeated failure to understand or accommodate the political factors at work in the Amazon undermines environmentalists' efforts to protect the rainforest.

W ith the possible exception of certain endangered species and NASA images of the growing holes in the ozone layer, there is no issue on the global environmental agenda as "photogenic" as tropical deforestation. Images of forests in flames or of heavy curtains of smoke enveloping huge swaths of the western Amazon and of Southeast Asia have, for better or worse, etched "tropical deforestation" onto the public consciousness. It has especially come to be identified with the destiny of Amazônia, and of the lion's share of the Amazon rainforest that is located in Brazil. This is no accident. From the end of the 1960s to the present, an area bigger than France has been destroyed or seriously damaged (Veja, 1997).

Tracking the ebbs and flows of Amazônia as an issue provides us with a fascinating case study in environmental politics, both domestic and international. Over the last century, Amazônia has occupied a special place in the imagination—at once "green hell" and "enchanted forest," containing in equal measure the promise of untold wealth and of ecological catastrophe. All of these portrayals have been invoked at one time or another by those attempting to influence the direction of Brazilian government policy and practice in the region.

This article argues that, despite having made tremendous headway in public opinion (in Brazil as well as abroad), environmentalists have still not found a way to make conservation of the Amazon forest politically palatable in Brazil. Moreover, Brazilian policymakers' growing stress on making environmental "goods" pay their own way—

encouraged in that position by domestic and multilateral economic actors—makes it unlikely that this situation will change any time soon. As a result, whenever Amazonian conservation measures require legislative approval or serious political support in Brazil, they founder. These political impediments reinforce a tendency among conservationists to bypass political organs, thus fueling the latters' suspicions of conservationists' motivations and contributing to a vicious circle of distrust that results in further degradation.

There have been very constructive efforts in recent years to identify sustainable Brazilian local land uses and to involve local people in conservation activities. Following the murder of rubber-tapper leader Francisco "Chico" Mendes in December 1988, the federal government established several extractive reserves to facilitate nonpredatory use of the forest for harvesting of rubber, Brazil nuts, and other activities. Interest in "sustainable" forest products, spurred by private firms like Ben and Jerry's and The Body Shop, led both local and international NGOs to pay more attention to inventing low-technology processes that would make more of this possible. A Rondônia-based NGO, for example, pioneered a process that mechanized separation of cupuaçu pulp from other parts of the fruit; it was eventually bought out by a large Brazilian frozen food company. One now finds in supermarkets in the south of Brazil fruits and juices like Açai and Cupuaçu, formerly only found in Amazônia itself.

But these advances are only small-scale improvements and should not be taken as a sign that

Margaret Keck is professor of political science at Johns Hopkins University and a recent Fellow at the Woodrow Wilson International Center for Scholars. She is the author of two prize-winning books: Activists beyond Borders: Advocacy Networks in International Politics (with Kathryn Sikkink) and The Workers Party and Democratization in Brazil. She has also published numerous articles on environmental politics.

conservation has won substantial political support among decision-makers. Without the latter, conservation will continue in planning mode and among scattered projects instead of becoming state policy. Although foreign money can help promote a conservation agenda, without domestic support it will always be fighting a rear-guard action-fighting fires that (often quite literally) have already gone out of control. Politicians matter in Brazil, both in national legislatures and at state and municipal levels. Until their opposition can be neutralized, most of Brazil's conservation activities remain cosmetic. The good news, however, is that at least for now, those in charge of Amazon policy at the federal level (a) are aware of the necessity to address opposition concerns and (b) are actively engaging state governors and other key political elites in ongoing dialogues about these issues.

Requirements for Progress

What would it take to generate real Brazilian political support for tropical forest conservation? First, conservationists must recognize the full range of land use alternatives that private investors, small farmers, fishers, recreation developers, mining companies, plantation developers, politicians, and national security specialists see when they look at the region. These actors do not, in the main, see forests and biodiversity. They see an environment that is crisscrossed with human activity and history, with a great variety of private ventures involving individuals, firms, and traditional populations. Interfering with these private activities requires justification on the basis of a compelling public interest. Indeed, this process of negotiating interests is the essence of environmental politics.

Environmental politics involves changes in the legal and cultural norms regulating the relationship between human beings and the natural world. We define "environmental"—literally, pertaining to what is around us—as context, with ourselves as the center. This is distinct from the term "ecological," which derives from the word *oikos* (or home) and denotes an idea in which humans are part of the context. These are public norms, whether or not they regulate public or private behavior. To define something as environmental is to impute to it a public relevance, a public interest. When someone complains that the pile of trash by the stream head is compromising the quality of the stream, those who left the pile can no longer insist that, since it is on their property, they have every right to put their trash there. The disposal of their trash has ceased to be a private issue and has become a public one.

Politicizing an environmental problem-making it into an issue-takes place in three stages: framing, action, and consolidation. Framing begins with naming, the act of placing a "situation" in a category that readies it for action. In the case of the trash heap, naming the problem involved the move from lamenting the dirty water to calling it a polluted stream. In the case of the Amazon, it involved a similar move-from recognizing a diffuse process of frontier settlement (in which the focus was on the human side of the frontier) to calling it "tropical deforestation," in which the focus was on the forest itself. This shift only began to happen during the 1970s. Framing also invokes a causal story whose function is both (a) to demonstrate that a problem is not an inevitable result of a "natural" process and (b) to identify the persons or organizations responsible (whether for the problem itself or for its solution) (Stone, 1989). In the case of Amazônia, shifting the blame for forest loss from small farmer settlers to the government policies that enticed them to the region in the first place changed the political locus of action. There is often considerable resistance to particular ways of framing an environmental issue; the ongoing debate over human contributions to global climate change is a perfect example of this resistance. Finally, those who frame an issue may do so strategically, stressing one set of causes or potential solutions over another in order to raise the issue in the institutional setting most likely to be receptive to their claims.

New issues anywhere tend to get on the political agenda in waves—what public policy scholars call a punctuated equilibrium (Baumgartner & Jones, 1993). This means that, at particular moments, a long period of relative stasis can give way to a sudden burst of

Editor's Note: Both this article as well as the following article by Thomaz Guedes da Costa were originally presented in Spring 2001 at "Environment and Security in the Amazon Basin," a series of three Woodrow Wilson Center meetings cosponsored by the Environmental Change and Security Project and the Center's Latin America Program. The complete set of papers from these meetings can be obtained by e-mailing lap@wwic.si.edu

activity in which new issues and actors suddenly win attention and succeed in getting action on a problem which may either be new or have been languishing in relative neglect for a long time. There are any number of reasons for such moments, ranging from a natural disaster to the passage of a new law to a regime transition. These stimuli produce political opportunities; but unless these opportunities are seized by strategically-minded actors, they are normally missed. Even at moments replete with opportunity to dramatize an issue, the political skills needed to do so have to contend with the political skills of opponents. In the recent history of Amazônia, the political skills have too often been in the hands of the forces of devastation.

HISTORY OF ENVIRONMENTALISM IN AMAZÔNIA

Amazônia has a long history of cycles-not only

of boom and bust, but also of periods of geopolitical significance alternating with periods of relative neglect. The region was first linked to the rest of the country by telegraph, and many of its territories were demarcated at the beginning of the 20th century by the expedition led by Marechal Cândido Mariano da Silva Rondon in 1907. Rondon's mission coincided with the end of the rubber boom, caused by the successful British effort to produce latex on its Asian colony plantations. Nonetheless, the mission made possible the mobilization of Brazilian rubber tappers to reactivate the production of natural latex during World War II, when the rubber plantations of Southeast Asia were under the control of the Axis powers. Rondon himself was guite sympathetic to the fate of indigenous peoples in the region, and much of the protective legislation regarding Indians was enacted as a result of his encounters. But like their counterparts elsewhere, Indians in the Amazon came out of the



encounter with new epidemic diseases as well as the prospect of intensified settlement of their ancestral lands.

In the late 1960s, the Brazilian military dictatorship incorporated the Amazon explicitly into a national security agenda, with a focus more geopolitical than explicitly domestic. The importance to the regime of settlement and development of the region derived from (a) a belief that subversion could out "the need for careful consideration of the environmental problems involved in Amazonian development" ("The Opening Up of Brazil," 1972). UNESCO picked up IUCN's concern and made conservation of the Amazon rainforest the first project of its Program on Man and the Biosphere in 1971. But the Brazilian military government viewed the conservationist position as unwarranted interference in both its domestic and national security affairs. For

By assuming a strongly nationalist position at the United Nations Conference on the Human Environment at Stockholm in 1972, the Brazilian government put the international community on notice that it regarded environmentalists' calls for preserving the Amazon rainforest as attacks on Brazil's sovereignty.

take root in neglected and scarcely populated areas, and (b) a desire to demonstrate Brazil's greatness through the enormous wealth of natural resources held by the region. The view of the Amazon as repository of wealth, and of Brazil's destiny as coupled with development of that wealth, persists today. Thus, foreign efforts to influence Brazil's actions in the region have long been seen as the result of the *cobiça international*—international covetousness—regarding the region's resources (Reis, 1982).¹ The most recent wave of political attention to the region came in the late 1980s, stimulated from abroad as tropical deforestation became part of the agenda of "global" ecological problems.

Inventing "Tropical Deforestation"

In fact, the term "tropical deforestation" made it onto the international agenda in the first place because of the Brazilian Amazon. As late as 1968, the Latin American Conference on Conservation of Renewable Natural Resources had no session on forests, and in the index for volume 2 of the *IUCN Bulletin*, covering the period from 1967-1971, there is no entry for forests, deforestation, or tropical forest. The problem had not yet been named.

However, conservationists both inside and outside of Brazil worried about the development programs that the military government launched in the 1960s. Responding to the Brazilian government's decision to accelerate colonization and development plans in the region, IUCN—The Word Conservation Union— President Harold J. Coolidge and World Wildlife Fund (WWF) President Prince Bernhard of the Netherlands wrote to Brazil's President Médici in 1972, pointing most Brazilian officials, conservationists were just stalking horses for foreign governments seeking to prevent Brazil from achieving the place in the sun that its rapid development seemed to promise (Castro, 1972).

By the early 1970s, a massive program of road building was luring wave upon wave of settlers to the region-in search of opportunity, a plot of land to call their own, or perhaps a chance to strike it rich with tin or (later) gold. As the chain saws felled larger swaths of forest, organizations like IUCN and WWF encouraged Brazil's Environment Secretary Paulo Nogueira Neto to create conservation areas where possible. However, with almost no budget or human resources to monitor these areas, Nogueira Neto was in no position to defend them. Meanwhile, by assuming a strongly nationalist position at the United Nations Conference on the Human Environment at Stockholm in 1972, the Brazilian government put the international community on notice that it regarded environmentalists' calls for preserving the Amazon rainforest as attacks on Brazil's sovereignty.

Despite this initial flurry of high-profile diplomatic posturing, subsequent years saw an increase in not only settlements (and the failure of many of the early ones) as well as deforestation, but also in the number of (formally) protected areas in the Amazon. Scientists advocated protected areas because they believed that more knowledge, better education, and the gradual empowerment of the institutions charged with conservation offered the only real vehicles for change. Over the next decade or so, researchers at INPA (The National Institute for Amazon Research), the Museu Goeldi, and Brazilian and foreign universities vastly increased the store of basic scientific knowledge about the region's ecology, while historians, anthropologists, geographers, and the occasional political scientist studied its peoples.

What of Brazilian environmentalists during this period? Although a Brazilian Environmental Secretariat was established after the United Nations Conference on Human Environment in Stockholm in 1972, and Nogueira Neto (a longtime conservation activist in São Paulo and well-known in international conservation circles) was named its head, this secretariat had no authority to challenge what other agencies in the government were doing and almost no resources to do anything on its own (Interview, Nogueira Neto, 1991). Despite these limits, Nogueira Neto managed both to raise the profile of environmental issues in the press and to establish a few protected areas. But challenging the government on the Amazon, the country's undeveloped "heartland" in geopolitical terms, would have cost him his job.

However, after the Geisel government began to relax the regime's strictures against opposition political activity in the mid-1970s, the opposition did take up the issue of Amazon preservation. In 1978 and 1979, it mobilized over the consignment of huge swaths of forest to investors for timber exploitation. At the end of 1978, the youth section of the opposition MDB party² in Amazonas called for general protests of the government's Amazônia policy. Out of this opposition grew the Movement in Defense of the Amazon, organized in 18 states and the federal district. The movement's appeal well went beyond environmentalists. In campaigning against the internationalization of the Amazon, the opposition appropriated for itself the nationalist appeal that the military had tried to wield with its developmentalist project in the early 1970s. The movement also protested (a) the lack of transparency and participation in decisions about the Amazon and (b) the lack of concern for the fate of impoverished inhabitants of the region. The movement's impact on policy was not very great, but it did nurture activists who later became regional leaders of the environmental movement (especially in the north and northeast of Brazil). The government response was primarily to make sure that forest policy discussions took place behind securely closed doors (Hochstetler, 1996).

Normally, however, the Brazilian military regime reserved for itself the mantle of defender of the nation. This perspective was especially evident in relation to indigenous rights claims. Around the end of the decade, scholars and activists trying to secure the rights of indigenous peoples also became important actors in the Amazon story. Their actions were invariably interpreted as threats to Brazilian sovereignty over its territory. Even their language (speaking of indigenous "nations") raised the hackles of national security officials. The presence of guerilla activity in the Alto Araguaia region until 1973 made the Brazilian military particularly sensitive to this issue.

The struggle over the nationalist mantle between the Brazilian government and the Movement in Defense of the Amazon during the late 1970s was essentially a domestic struggle that did not spill over into international institutions. Indeed, aside from UN agencies like the United Nations Environmental Programme (UNEP) (which could do little more than issue advice and admonitions), there were no international venues appropriate for acting on concern over deforestation in the Amazon. This situation changed in the 1980s, largely due to the political entrepreneurship of environmental activists and the commitment of a small number of people within multilateral development institutions (especially the World Bank). The next wave of attention to the Amazon was much more strident than the preceding one, and found the Brazilian government in a much less favorable position to respond.

"The Burning Season" ³

Foreign interest in the Amazon swelled again in the late 1980s with the rise of "global" environmental issues such as depletion of the ozone layer and (especially) climate change. Through a set of serendipitous associations, tropical deforestation became associated with global climate change.⁴ The coincidental element was provided by the weather during the U.S. summer of 1988. A month of sweltering heat and prolonged drought, coming on the heels of scientific warnings about probable human impacts on climate, seemed to confirm the worst predictions of the latter. At the same time, satellite images became available showing the extent of fires in the Brazilian Amazon that had been set to clear land either for farming or for speculation. The huge number of Amazonian fires made for great photos, stimulating even more press coverage.

For foreign audiences, a process spearheaded by Brazilian land speculators trying to defend their extensive properties became (in simplified media translation): "Brazil is burning down the rainforest."

Map 2. Amazonian States



International pressure to control the situation produced a nationalist response as it had a decade earlier-but this time Brazil was in a much less favorable position to resist. Events and rhetoric about Brazil during the 1972 Stockholm conference were far different: the Transamazon Highway had just opened, glossy magazines had proclaimed a new life on the frontier, and critics of Brazil's Amazon policy had been cast as spoilers who wanted to impede Brazil's glorious progress. But by 1988, the Transamazon Highway was overgrown, crater-filled (barely passable by motorbike at some points), and lined with deserted settlements, victims of too many hopes with too little infrastructure and extension support. The new life on the Amazonian frontier had made a few people rich, but it had broken as many dreams as it had fulfilled. Consequently, at least some of the skepticism about what was going on in the region was homegrown.

The years 1987 and 1988 were record years for Brazilian deforestation-not because of a sudden peak in new settlements or new ranching operations in the region, but for political reasons. In the Brazilian Constitutional Congress underway at the time, there was a real possibility that agrarian reform measures would be adopted. The prospect led to the creation of a rapidly organized counterattack by rural landowners under the leadership of the UDR (the Rural Democratic Union), which eventually succeeded in gutting the redistributive planks of the new charter. However, ranchers and others with large landholdings in Amazônia did not want to take any risks. Since any land-reform measure was likely to focus on socalled "unproductive" land, they looked for ways to make their expanses appear productive. At that time, one of the ways to demonstrate that land was productive was to clear it; such clearing counted as an improvement, which added value to the property. And in case clearing was not enough, it was always possible to add a few cows. As a result, around 300,000 square kilometers of forest were destroyed in the last years of the 1980s (Hecht 1992, page 21).

Giving the Rainforest a Human Face

In the late 1980s, Brazilian environmentalists gained a whole new set of arguments tying conservation of the Amazon forest with protection of human extractive activities. Brazil nut gatherers, rubber tappers, and fishers were highlighted as examples of groups that lived in and off the forest without destroying it. But the livelihoods of these groups, small though they might be, were being threatened by the advancing settlement frontier. Accounts of their endangered situations created a

reserve—a form of protected area that allowed for collection and sale of renewable forest products (natural latex, Brazil nuts, and some others) under the protection of the national environmental agencies. Paulo Nogueira Neto was receptive to the idea, and it won support both from environmentalists in southern Brazil and from those in the United States and Western Europe who were campaigning to make the multilateral development banks (especially the World Bank) more environmentally responsible (Keck, 1995; Keck & Sikkink, 1998; and Keck, 1998).

When Chico Mendes was murdered in the midst of sustained international attention to deforestation in the Amazon region, the issue attained unprecedented salience. Brazilian President José Sarney created the first extractive reserves and took steps to curb some of the worst abuses in the region (though

Worried that piecemeal solutions could not address the problem, the World Wildlife Fund (WWF) introduced in the mid-1990s an audacious campaign to try to get the Brazilian government to commit formally to conserving 10 percent of the Amazon forest.

powerful narrative contesting the government's claim that fighting poverty required the large-scale development (and hence deforestation) of the Amazon (Keck, 1995). When rubber tappers' organizations from the western Amazon made common cause with environmentalists, it also undermined the popular tendency in Brazil to dismiss environmentalism as a hobby for the well-heeled and well-fed. In addition, the assassination of Francisco "Chico" Mendes in December 1988 by local ranchers created an ecological martyr and gave the problem of deforestation in the Amazon a human face.

The rubber tappers were well aware that, unless they built some powerful alliances, it would be only a matter of time before the advancing ranching frontier pushed them out of the way. With the help of the National Rural Trade Union Confederation (CONTAG), the tappers had won court cases that recognized their legitimate use rights to the land they worked. But the law was only a minor impediment to ranching expansion and land depredation in that region. The rubber tappers worked with Mary Allegretti (an anthropologist from the southern state of Paraná who later became Brazilian secretary of the environment for Amazônia) and Oxfam representative Tony Gross to develop the concept of an *extractive* these measures were weakly enforced). The humanization of the deforestation issue was especially constructive in augmenting the participatory component of conservation programs then on the drawing board. For example, it had an enormous impact on the Amazon Pilot Program (funded largely by the G-7 and administered by the World Bank), which is providing both small- and large-scale funding to a range of conservation projects in the region. The program also financed capacity building and institutional infrastructure for NGOs to make it easier for them to monitor activities in the region. Although the pilot program's results are small in scale, the program has funded a significant number of demonstration projects, transformed the methodology of demarcating indigenous reserves, and had some degree of impact on public policies.

Making the Forest Pay

Since the source of the spike in Amazonian fire incidence in 1987 was not widely understood, its use thereafter as a baseline for measuring subsequent deforestation in the Amazon was misleading. It caused observers to overestimate the impact of policies intended to discourage it. On paper, at least, the Brazilian government undertook several important policy reforms to reduce deforestation. In the package of policies known as "Nossa Natureza" (Our Nature), President Sarney announced the consolidation of existing forest and fisheries administrations into a single environmental institute called the Brazilian Institute for the Environment and Renewable Resources (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis-IBAMA). IBAMA was charged with monitoring and licensing the cutting of forested areas. However, IBAMA was seriously understaffed in the field, and plans for increased monitoring proved hard to carry out when underqualified field personnel lacked even funds to buy gas for the cars and boats they were expected to use. Thus, despite both policy change and sophisticated satellite monitoring capabilities developed at the Brazilian Institute for Space Research (INPE), the drop in deforestation rates after 1987 and into the 1990s were mainly because of recession, not state action. After the recession ended, high rates of deforestation returned-and 1997 looked much more like 1987 than the decade in between. When a wave of land occupations led by Movimento dos Sem Terra (the Landless Movement) at the end of the 1990s put agrarian reform back onto the political agenda, the rate of burning again skyrocketed almost immediately.

The use of the 1987 baseline was only one of the elements that allowed the Brazilian government to buy time through the early 1990s. Another was the successful bid by Brazil to host the 1992 United Nations Conference on Environment and Development (also know as the Earth Summit) in Rio de Janeiro. President Fernando Collor, the first directly-elected Brazilian president in close to thirty years, swiftly moved after his inauguration in 1990 to pacify both foreign and domestic environmentalists. He elevated the environmental secretariat to ministerial status and appointed José Lutzenberger, a key figure in Brazil's environmental movement and one with broad international recognition, as its minister.

Both foreign and Brazilian environmentalists applauded the move, and adopted a wait-and-see attitude. Even when it became increasingly clear that Lutzenberger (however important an environmentalist he might be) was not an effective minister, most of his potential critics remained silent. With the widespread mobilization of a broad range of organizations in preparation for the Earth Summit and the publicity it generated, there was still reason to believe the salience of environmental issues in general and of the Amazon in particular was bound to increase within Brazilian policymaking.

But Lutzenberger's inability to build on the momentum of the Rio occasion (coupled with corruption scandals involving Collor that exploded the minute the Earth Summit ended) wiped the environment off the Brazilian political map. For the next six months, the country's attention was glued to Collor's impeachment process; and by the time he had left office, the opportunity had dissipated. This is not to imply that there has been no environmental progress since Rio. In fact, over the last two decades, environmental issues have entered Brazilian popular culture and attained special importance among Brazil's young. There is more information and more general public sentiment in favor of conserving natural resources than ever before. However, this support is still not reflected at the level of politics. The great opportunity of the early 1990s was largely wasted.

The efforts to make extractive activities appear economically viable (and thus able to "support" the forest, represented in the 1990s by biodiversity conservation arguments and bio-prospecting) were also unsuccessful. Although there were some high-profile economic activities generated during this period involving sustainably-generated rainforest products, these products remained highly subsidized by their corporate marketers. Bolstered by international pressure to eliminate both tariffs and non-tariff barriers, the Brazilian government had in the main embraced neo-liberal policy prescriptions. The proponents of neo-liberal reforms were anti-regulatory and highly optimistic about market solutions.

In this new policy environment, opponents of deforestation tried to bolster their position by arguing that a properly-conserved Amazon forest could pay for itself. Since the Amazon's environmental services are public goods (and thus hard to quantify in market terms), environmentalists began stressing the lucrative potential of its private goods-forest products and future pharmaceuticals. But although these arguments are easier to communicate, they are ultimately less compelling than the scientific and ethical issues at the core of tropical forest conservation and protection of indigenous peoples. It has been extraordinarily difficult to make a convincing case based on opportunity cost that deforestation does not pay-a case made even harder by a tendency towards heavy discounts on the future.

However much proponents of preservation and proponents of limited use may have made common cause during the 1990s, there is still a wide divide

Amazonian Deforestation Projections for 2020



Source: Oregon State University (2001, January 18)

between them. This gap persists among Brazilians and among foreigners concerned with the Amazon. Generally speaking, the first set is more often associated with the more traditional conservation organizations in Brazil and the larger conservation NGOs internationally. At the beginning of the 1990s, it looked as though these two positions were going to come together more than they eventually did. International conservation organizations began to pay much more attention to people-based environmental management, especially community-based resource management initiatives. A growing literature on common-pool resource management suggested that a great many communities had over time developed remarkably effective institutions to manage such resources, and that not all had degenerated into a "tragedy of the commons" (Hardin, 1968; Ostrom, 1990).

However, human-centered projects and programs tend almost by definition both to be very small scale and to have a significant failure rate. Concerned that these locally-focused activities were creating only an unsustainable patchwork of conservation, many conservationists wanted to focus their efforts on larger areas. The sharp rise in deforestation rates that came with resumed growth in the region also fueled a fear that time was running out. A decade after Nossa Natureza, IBAMA still had only 400 people in the field to monitor forest use.

By the end of the 1990s, timber companies (not a major contributor to deforestation in the Amazon in 1987) had become major Amazonian loggers. In a study concluded in December 2000, IBAMA found that around 80 percent of the management plans of timber operations in Amazônia were irregular. In many cases, the amount of timber listed in the documentation presented to the government as scheduled to be harvested was more than the number of actual trees in the area. Timber companies used the difference to "launder" the logs harvested in reserve areas that were supposed to be off-limits (Angelo, 2000). But until IBAMA's recent survey, no one had ever gone out to the field to verify the inventories listed on the documents.

With the Cardoso government (which took office in 1994) more concerned about restructuring Brazil's economy than it was about conserving forest, timber revenues were attractive. Timber exports brought in more than 1.1 billion reals (over U.S. \$1.03 billion) in 1997. The push to increase Brazilian exports generated more pressure on a variety of ecosystems. For example, new federal regulations (a) allowed more deforestation on savanna land (favoring soy producers), and (b) increased the number of situations in which deforestation limits could be waived. Alongside these legal activities, the drug trade—long a significant source of revenues in Amazônia—was becoming increasingly powerful.

Worried that piecemeal solutions could not address the problem, the World Wildlife Fund (WWF) introduced in the mid-1990s an audacious campaign to try to get the Brazilian government to commit formally to conserving 10 percent of the Amazon forest. In 1997, worried about the damage that reports of increased deforestation were doing to Brazil's public image, President Fernando Henrique Cardoso endorsed the 10-percent proposal. In November 1999, a team for the Ministry of the Environment, Secretariat of the Amazon, began to work with people from WWF-Brazil to identify areas for protection under this program.

The process was not smooth. Despite objections from some members of the team (and despite a prior agreement that the 10 percent could include some areas for "direct use," i.e., areas with some sustainable human activities such as extractive reserves and national forest), the WWF representatives and several others on the team insisted that only "indirect use" protection would be contemplated. However, when the team forwarded the first version of its proposal to both the Global Environmental Facility (tagged as a significant funder) as well as to Mary Allegretti, the Secretary of the Amazon, Allegretti commented that they had managed to create something that would alienate absolutely everyone who could be alienatedboth extractive Amazonian peoples (who by this protocol would have to be removed from the territories in question) and development interests. What made the situation even more problematic was that, over the past several years, the Brazilian Environmental Ministry has been unable to get any protected area legislation passed in the country's Congress due to opposition from Amazonian politicians. Allegretti sent the team back to the drawing board with instructions to include some direct use areas as well.

Allegretti's determination to create a feasible program in fact represented an important advance in the politics of the Amazon. Recognizing that confrontation was not producing any positive effects, she began to sponsor "positive agenda" conversations about alternatives to deforestation with state government officials in the Amazonian states. Thus far, she has drawn up positive agenda statements from the states of Acre, Rondônia, Amapá, and Roraima. Although these are fairly minimal agreements, their very existence is an important step.

CONSISTENT CONSERVATIONIST MISTAKES REGARDING THE AMAZON

If we examine efforts to protect the rainforest over the last two decades of Brazil's history, we can detect a number of persistent misconceptions that have complicated policymaking in and for the region. Some are misconceptions about current settlement patterns in the region. Others have to do with the expected behavior of important actors. Conservationists in general—and foreign conservationists in particular have fallen prey to one or all of these at one time or another (as have many of the region's best analysts).

1. Essentialism

By essentialism, we mean the tendency to take either the position that people are naturally conservationist or that they are naturally destructive. Neither absolute seems warranted by the evidence; of more relevance is a careful examination of the kinds of incentives that exist for one or another behavior, incentives that will vary from place to place and from time to time. Into the essentialist category we also have to put those who believe that indigenous people always will desire to protect a particular area. Thus, when the Kayapó Indians sell timbering rights to lumber companies, these essentialists are horrified and may indeed go too far in then concluding that indigenous peoples are no more likely than others to conserve natural areas (Conklin and Graham, 1995). Cultures, identities, and institutions or structures of authority and practice may be relatively sticky, but they are not frozen; people respond to new opportunities, and the way they do so reshapes the older relationships.

2. Keep politicians out of the loop if you want to get anything done

Many conservationists believe that the best approach to dealing with politicians in Brazil is to present them with plans for a protected area as a *fait accompli*, so that they will not be able to do anything about it. These conservationists think that politicians will try either to reject or to modify proposals for political (usually self-serving) reasons, thus undermining the more "objective" scientific rationality contained in the proposal. A good illustration of this phenomenon was the process by which the first approximation of an agroecological and economic zoning plan for the state of Rondônia was drawn up in the early 1990s. Put together by technically proficient and for the most part well-meaning state officials working with consultants, the plan generated widespread controversy in the state because the kinds of land-use mandated by the plan often did not correspond to the situation on the ground. This mismatch was partly because the team that drew up the plan worked mainly from satellite images and did very little traveling outside the state capital.

More important, however, was the political isolation within which the team worked. When asked whether they had consulted with local government officials in different parts of the state in drawing up the zoning plan, the planners responded that they had not, since the local government officials were certain to be against it. However, local government officials were going to be responsible for much of the plan's implementation. While in the short run this kind of insulated strategy may streamline the creation of "paper parks," it also creates a kind of virtual reality, in which all of the actors act as if they believed something were true while knowing that it is not. Over the long run it has politically disastrous results and is the best way of insuring that park boundaries will not be respected.

When push comes to shove, no one is willing to risk much political capital on a plan drawn up in virtual reality, "para inglês ver."⁵ As long as Brazil is either unwilling or unable to put money behind enforcement and monitoring, consent and political support are the only resources to make a policy effective. However tough it is to work things out with opponents of conservation, preaching to the choir is a much greater waste of time than is preaching to the unconvinced.

3. Officials in technocratic state agencies are free agents whose technical training disposes them to support conservationist goals

Although in many cases the second half of this statement is true, the first half almost never is. State officials are not free agents. Brazilian technical officials (especially in Amazônia) who are at a decision-making level are politically appointed. Their posts are usually doled out among supporters of the governing coalition (who might be federal or state deputies, mayors, or other political bosses), ensuring that important supporters may appoint part of their own political coterie to public jobs. In addition, the political appointment process usually reaches several levels down, and the sponsor of names for the second and third echelon appointees may not be the same as the one who appoints the department heads. As a result, different levels of the same bureaucratic agency may or may not share a common agenda or governing style. These officials are constrained by the political sponsors at whose behest they serve. They can be removed through the same political process that appointed them in the first place, either because they fall out of favor with their immediate sponsor or because the sponsor shifts allegiances or falls out of favor with the governor, mayor, or president who heads the coalition. The extent to which these officials can take unpopular positions and remain in office thus varies a great dealbut it is usually low.

4. Failure to pay attention to political context

"Environment" is not a policy arena that exists in a vacuum. Neither is Amazônia, its deforestation, or its development. Understanding what is going on with regard to the Amazon requires paying attention to two relevant dimensions: (a) activities and dynamics in areas that are politically linked to some aspect of forest conservation—that is, linked in *political space*, and (b) items and dynamics on the relevant political agenda (national, regional, international)—that is, linked in *political time* What is important here is the perceptual linkage, not that the relationship in reality bears any resemblance to the perception.

The debate over agrarian reform in the Brazilian Constituent Assembly is a perfect example of the former. For landowners in the Amazon, the possibility of expropriation caused them to speed up deforestation on their properties to demonstrate that land was being prepared for productive use as pasture. Land reform and conflict over land tenure have been among the issues most consistently linked with deforestation in Brazil, just as climate change and indigenous peoples are the policy areas most consistently linked with Amazônia outside of Brazil—especially in the United States.

Brazilians, on the other hand, have always believed that foreigners think of Amazônia primarily in terms of its purportedly vast mineral wealth and potential hydroelectric power. Although it must have some, it is not clear how much of an impact multinational involvement in the region has on U.S. foreign policy positions on Amazônia. Nonetheless, Brazilian politicians and some diplomatic personnel continue to insist that the U.S. government is not really serious when it takes conservationist positions and that these positions are essentially a front for U.S. multinationals.

Besides being aware of how their motivations are perceived, conservationists working in the Amazon need to be more aware of how other policy areas affect the ones that most concern them. This need has become abundantly clear with regard to land and energy policy. Other policy areas-for example, the expansion of the highway network being undertaken as part of the federal government's "Avança 2000" infrastructure development program-have even greater potential for disruption. Where roads are built in previously undisturbed areas, ecological processes are disrupted and/or destroyed, and settlements inevitably follow. With its focus on privatizing infrastructure development wherever possible, current Brazilian government policy provides a degree of insulation for economic actors from the constraints of environmental regulation.

Political time is also an important factor: environmentalists have always had to seize what political opportunities become available to accomplish reforms. Institutional capacity has tended to develop in the wake of major events—such as the 1972 Stockholm conference or the intense international focus on global environmental issues in the second half of the 1980s. Most people expected another such flurry of capacity-building in the wake of the Earth Summit in 1992, and Brazilian environmental and social change organizations mobilized for two years prior to that conference to build for just such an eventuality.

5. Money is the main problem, and "capacity building" is the solution to weakness of environmental protection institutions

The usual version of this argument is that the money to establish, maintain, and monitor conservation units is simply not available. There is a good bit of truth in this statement. However, if money were the main obstacle, then a big push on fund-raising by conservation organizations (coupled with other instruments such as debt-for-nature swaps and foreign assistance by sympathetic governments) should resolve the problem. When it does not do so, the failure is often attributed to "lack of technical capacity" or "lack of institutional capacity" on the part of the agencies charged with establishing and/or running conservation units. But capacity has to be measured relatively and absolutely. If an environmental agency is short on money or technical capacity, is it equally true that the transport or public works secretariats lack these things? In fact, governments make choices about where to allocate existing capacity, and the choices are political. Governments must be convinced that protection of the landscape ought to be a priority expenditure before they will make it one. It is therefore impossible to separate the question of adequate funding or capacity from the need for the political will to use money for conservation purposes. In the absence of the latter, no amount of money or skill will make much of a difference.

Abundance (especially sudden abundance) of money or technical expertise can cause as many problems as its lack. Both non-governmental and governmental organizations can quickly become intoxicated with easy money from outside. The fact that the budgetary cycles of both the funders and the funded (in the case of governments) produce boom and bust periods in which recipients go for long periods waiting for money to arrive (and then are constrained to spend their windfalls before a predetermined deadline) is particularly noxious in this respect.

CONCLUSION

It is easy to despair after reviewing the last thirty years of history of the Amazon region. Conservationists have found victories difficult to win and even harder to sustain. Politics and political context *always* play an important role in decisions about the region, and those who want to affect those decisions ignore that context at their peril.

Brazilian conservation success stories confirm this lesson. Consider, for example, the case of the Brazilian state of Acre, where those who wanted to keep the forest standing were part of—and helped to create—a substantial coalition that opposed predatory land uses at the same time as it opposed predatory politicians. That movement eventually succeeded in electing people who supported these goals to high office mayor of the state capital, then governor and senator. Under those circumstances, the terms of the equation may begin to change. But to sustain that change, there must be support from outside of Amazônia, and especially from Brasília. We are once again witnessing a shift in the political context and the agenda on which Amazônia appears. In Amapá, where a similarly well-intentioned governor attempted to face down a state legislature permeated with drug money, the legislators were able to create a prolonged stalemate with little more than verbal opposition from Brasília. Although the ubiquity of drug-related activities has been known in the region for at least a decade, only recently has it been admitted officially as a national security problem.

Over the last three years, the rate of deforestation in the Amazon has crept up again. Between August 1999 and August 2000, 19,000 square kilometers of forest were deforested-the second most destructive vear of this decade after 1995 (Schwartz, 2001). That amounts to the size of a football field every eight seconds. The story is achingly familiar. Under pressure from soybean producers to provide a cheaper outlet to the sea, the Ministries of Planning and Transportation (without consulting the Ministry for the Environment) agreed to pave the unpaved part of Highway BR-163 between Brasília and Santarem in the state of Pará. The currently unpaved part of the highway cuts through the Tapajos forest reserve and other vulnerable sections of forest. At the same time, under pressure from the landless movement, the government has increased the number of new small farmer settlements in the region. These settlers, in turn, use fire to clear their land, and the frontier advances. Along with loggers, settlers are likely to move along the paved roads, until they are bought out by the ubiquitous cattle ranchers. The combination of paved roads, settlers, and extractors (of minerals or of timber) is one the region has seen many times before.

As each cycle of destruction runs its course, new instruments have been created to make sure that there would not be another like it. The environment ministry and its congressional allies have called the move to pave BR-163 illegal—as any such large undertaking must, by law, have an environmental impact assessment. Whether they are strong enough to prevail against far stronger pressure from the road's proponents remains to be seen.

ENDNOTES

¹Arthur César Ferreira Reis's famous book *Amazônia e a Cobiça Internacional* is still widely cited as a major authority on Amazônia in foreign relations, and similar themes are stressed in the majority of Brazilian writings on the region. See, for example, Procópio (1992).

²MDB (Movimento Democrático Brasileiro—Brazilian Democratic Movement) was the legally sanctioned "opposition" political party during the military dictatorship that ruled Brazil between 1964 and 1985-89. A mere paper opposition through most of its first decade, the party began to exercise a genuinely oppositional role beginning with the relaxation of restrictions on its electoral activity in 1974. By 1978, the "opening up" of the authoritarian regime was in full swing.

³This was the title of a 1992 book by U.S. journalist Andrew Revkin about settlement of the western Amazon and the life of Francisco "Chico" Mendes, leader of rubber tappers in the region of Xapuri, Acre, who successfully confronted cattle ranchers encroaching on the land they had traditionally used. Mendes was assassinated by a cattle rancher in December 1988.

⁴This is not to deny that such a connection exists, but merely to note that public perception of a direct link between the record heat of several U.S. summers in the 1980s and the fires of the Amazon was vastly overdrawn at the time.

⁵ Literally, "for the English to see." This is an expression used in Brazil to mean something that is done to satisfy outsiders, but that is not really intended to work.

REFERENCES

- Alvarenga, Tales. (1997, December 24). "A Destruição da Amazônia." ["The destruction of Amazonia."] Veja. No. 1527.
- Angelo, Claudio. (2000, December 2). "Sobras'de planos de manejo sustentável aprovados pelo Ibama são utilizadas para ésquentar'exploração ilegal." ["'Surplus' from Ibama-approved sustainable management plans is being used to 'launder' illegal timbering."] *Folha de São Paulo*, A18.
- Baumgartner, Frank R. & Jones, Bryan D. (1993). Agendas and instability in American politics. Chicago: University of Chicago Press.
- Castro, João Augusto de Araujo. (1972). "Environment and development: The case of the developing countries." *International Organization 26*(2), 401-16.
- Conklin, Beth A. & Graham, Laura R. (1995). "The shifting middle ground: Amazonian Indians and eco-politics." *American Anthropologist 97*(4), 695-710.
- Hardin, Garrett. (1968). "The tragedy of the commons." Science 162, 1243-1248.
- Hecht, Susanna. (1992). "Logics of livestock and deforestation: The case of Amazonia." In Theodore E. Downing, Susanna B. Hecht, Henry A. Pearson, & Carmen Garcia-Downing (Eds.), Development or destruction: The conversion of tropical forest to pasture in Latin America (pages 7-26). Boulder: Westview Press and U.S. Man and the Biosphere Program.

- Hochstetler, Kathryn. (1994). Social movements in institutional politics: Organizing about the environment in Brazil and Venezuela. Unpublished doctoral dissertation, University of Minnesota.
- Keck, Margaret E. (1995). "Social equity and environmental politics in Brazil: Lessons from the rubber tappers of Acre." *Comparative Politics 27*(4), 409-24.
- Keck, Margaret E. (1998). "Brazil's Planafloro: The limits of leverage." In Jonathan Fox & L. David Brown (Eds.), *The struggle for accountability: The World Bank, NGOs, and grassroots movement* (pages 181-218). Cambridge: MIT Press.
- Keck, Margaret E. & Sikkink, Kathryn. (1998). Activists beyond borders: Advocacy networks in international politics. Ithaca, NY: Cornell University Press.
- Oregon State University News and Communication Services. (2001, January 18). "Conservation battle faces long odds in Brazilian Amazon." [On-Line]. Available: http://osu.orst.edu/dept/ncs/newsarch/2001/jan01/ brazil.htm
- Ostrom, Elinor. (1990). *Governing the commons: The evolution of institutions for collective action*. New York: Cambridge University Press.
- Procópio, Argemiro. (1992). *Ecologia e degradação social.* ["Ecology and social degradation."] São Paulo: Editora Alfa-Omega.

- Reis, Arthur Cézar Ferreira Reis. (1982). *Amazônia e a Cobiça Internacional* (5th edition). ["The Amazon and foreign greed."] Rio de Janeiro: Editora Civilização Brasileira/Manaus: Superintendência da Zona Franca de Manaus.
- Schwartz, Christian. (2001, May 23). "Um campo de futebol a cada 8 segundos." ["A soccer field every eight seconds."] Voja. No. 1701.
- Stone, Deborah. (1989). "Causal stories and the formation of policy agendas." *Political Science Quarterly 104*, 281-300.
- "The opening up of Brazil." (1972, May). *IUCN Bulletin 3*(5), 18.

Environment and Security in the Amazon Basin

The Latin American Program of the Woodrow Wilson Center has published *Environment and Security in the Amazon Basin*, a series of papers given at Wilson Center meetings sponsored by both the Latin American Program and ECSP. (Two of the papers—those of Margaret Keck and Thomaz Guedes da Costa—are featured in this issue of the *Report*.)

The first meeting covered: environmental and sustainable development initiatives in the Amazon Basin; the roles of local, national, and international actors in the region; the evolving Brazilian national security perspective; and the rising threat of drug trafficking. The second meeting focused on environmental policy in the Brazilian Amazon and featured Mary Helena Allegretti, Special Secretary for the Coordination of Amazonian Policy in the Brazilian Ministry of the Environment. The final meeting examined Brazil's SIVAM Project and its implications on the Amazon.

For a copy of *Environment and Security in the Amazon Basin*, please contact the Latin American program at lap@wwic.si.edu.