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**Creative Approaches to Preserving Biodiversity in Brazil and the Amazon**

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Brazil is one of the world's most "mega-diverse" countries, with its Amazon and Atlantic forests and the Pantanal wetlands playing host to some 20% of the world's species. At the same time, Brazil is world famous as a degrader of its immense eco-systems, with areas the size of entire European countries being cleared annually. These two opposed observations are typical of Brazilian environmental politics, which are a complex tangle of steps forward and backward in many respects (Hochstetler and Keck 2007). This talk will focus on some of the more positive initiatives of modern Brazilian environmental politics, which have allowed environmentalists there not just to block or delay some degrading projects (a worthy effort in itself), but also to create new projects that actively preserve biodiversity.

In the Brazilian context, most successful efforts to save biological diversity will focus on larger ecosystems that support multiple species – including humans – rather than on single species initiatives. While 45% of Brazilians recognized deforestation as an environmental problem in 1997, more than any other environmental problem (Hochstetler 2002: 71), there is little evidence that many of them respond to more narrowly cast single species initiatives. In a country that continues to be among the most unequal in the world, inequality is built on deep poverty for tens of millions, especially those in rural areas. Brazilian environmentalists have tried a variety of formulations to show they understand the intersection of social and environmental problems in their country, from the Green Party's talk of *poliseria* (pollution plus misery) in campaigns in the 1980s to the 1990s' socio-environmentalism to new environmental justice networks with the turn of the millennium (Hochstetler and Keck 2007). This talk will reflect many Brazilians' conviction that environmental strategies work only when they consider a broader web of human and non-human needs, although it is worth pointing out that Brazilian governments at all levels also include more traditional forms of protection without resource use (*Unidades de Proteção Integral*).

One of the earliest models Brazilians developed for integrating environment and community development concerns came to be called the extractive reserve. A conservation unit oriented to sustainable use of forest resources (*Unidade de Uso Sustentável*), the extractive reserve model has recently been extended to marine ecosystems as well. In 2007, 75 extractive reserves exist, at varying levels of institutionalization and success. All of them share a focus on traditional extractive populations (not necessarily indigenous), whose small-scale agriculture, animal husbandry, and resource gathering does not undermine long-term ecosystem sustainability. Rubber tapper Chico Mendes, assassinated in 1988, helped develop the prototype, which reflected his multiple concerns: "We accepted that the Amazon could not be turned into

some kind of sanctuary that nobody could touch. On the other hand, we knew it was important to stop the deforestation that is threatening the Amazon and all human life on the planet. We felt our alternative should involve preserving the forest, but it should also include a plan to develop the economy” (Mendes 1989: 41). Thus the extractive reserves are not against development and use of ecosystems, but they are an alternative to some particular unsustainable forms of development. Some of the extractive reserves’ lessons about working with local populations to incorporate their knowledge into conservation practices have been replicated in other aspects of Amazonian planning, such as participatory mapping projects (Wood and Porro 2002).

The extractive reserves focus on local populations’ ecological knowledge and control over collectively owned land to achieve conservation, although realistic analyses of the reserves show that they also depend on a number of external forces (Hall 1997) – from government agencies that help to legally create, demarcate, and protect reserve boundaries to NGOs and alternative marketing networks that provide critical political and economic supports. Even with a historic rubber tapper, Marina Silva, as Minister of the Environment since 2003, all these conservation forces together face extremely high levels of violent conflict over land rights in the Amazon, with control over the natural resources on those lands elevating the stakes of the land struggles. When Sister Dorothy Stang was yet another victim of assassination over land issues at the end of 2005, the government responded by creating new extractive reserves. While they are a promising resolution of some environmental issues, they clearly cannot resolve the broader problems of the Amazon on their own.

A second strategy that has been used by Brazilians to protect the environment is what I call multi-scaled environmental protection networks. This is a fancy label for a simple observation: Brazilian environmentalists have sought and found a remarkable array of international allies for their efforts. The contacts are dense enough that it can be difficult to sort out just who is a “foreigner” and who is “Brazilian” (Hochstetler and Keck 2007). In the 1970s and 1980s, Brazil was one of the fulcrums of what became a key strategy of the global environmental movement – if not an origin of a more truly global movement in itself. Chico Mendes and his rubber tappers linked with US-based multi-lateral bank campaigners to form one of the most prominent transnational activist networks for environmental protection, successfully using their network to pressure the banks into beginning a long process of reformulating their procedures for considering environmental and local considerations (Keck and Sikkink 1998).

This kind of “boomerang” strategy, which draws in foreign actors to support Brazilian domestic environmentalists, has been successful enough in Brazil to regularly trigger nationalist backlashes against “internationalization of the Amazon” and other claims that Brazilians have lost control of their national territory. In one response, the Brazilian environmental justice network has begun to try to replicate the boomerang strategy within Brazil (Hochstetler and Keck 2007). This strategy is necessary because Brazil’s 27 states and federal districts have vastly different levels of environmental capacity. The strength of laws, environmental agencies, and social movements varies dramatically from one part of Brazil to another, and the three tend to be present or absent together. All are strong in São Paulo and southern regions of Brazil, but unusually weak in the Amazon region. The environmental justice network tries to coordinate action across Brazil that will prevent the geographic relocation of environmental hazards and risk from more to less regulated areas. It can identify connections between the mercury contamination caused by gold miners in the Amazon and that caused by multinational corporations in São Paulo and create activist links among the two sets of victims, for example. Activists have found that they need these kinds of multi-scaled environmental protection

networks because of the ways that environmental and development policies are made at all political levels, from local to national to regional to global.

Many of Brazil's environmental protection activities are increasingly backed up in the Brazilian judicial system. While this is routine in the United States, it is uncommon in other parts of the developed world and virtually unheard of in the developing world. The key actor is the *Ministerio Público*, or Public Ministry, which has been developing in strength and importance since the 1980s. This group of independent public prosecutors was given substantial independence and capacity to carry out environmental investigations that have made serious inroads against the traditional impunity of environmental law-breakers in Brazil. It can take on both governmental and private actors and pursue court cases or offer settlement agreements. With more than 21,000 investigations between 1985 and 2001 in São Paulo state alone, the *Ministerio Público* is a force to be reckoned with (McAllister 2004: 136). It is, like other actors, weaker in the Amazon than in the South, but it represents a potentially formidable tool for other countries to use in conservation as well.

### **Suggestions for Further Reading**

- Hall, Anthony. 1997. *Sustaining Amazonia: Grassroots Action for Productive Conservation*. Manchester: Manchester University Press.
- Hochstetler, Kathryn. 2002. Brazil. In *Capacity Building in National Environmental Policy: A Comparative Study of 17 Countries*, ed. H. Weidner and M. Jänicke. Berlin: Springer-Verlag.
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- McAllister, Lesley. 2004. *Environmental Enforcement and the Rule of Law in Brazil*. Ph.D. dissertation, University of California, Berkeley, Department of Energy and Resources.
- Mendes, Chico, with Tony Gross. 1989. *Fight for the Forest: Chico Mendes in his Own Words*. London: Latin America Bureau.
- Wood, Charles H. and Robert Porro, eds. 2002. *Deforestation and Land Use in the Amazon*. Gainesville: University Press of Florida.