



“WALKING THE FOREST WITH CHICO MENDES”

Executive Summary

In the book, “Walking the Forest with Chico Mendes,” lawyer and labor organizer Gomercindo Rodrigues provides a rare and personal primary account of the life of Chico Mendes—a leader of the rubber tapper union in the Western Amazon state of Acre and a pioneer of the Brazilian environmental movement, who was gunned down in December 1988. The book chronicles the events that defined Mendes’ life, as he struggled for environmental protection and social justice in the Amazon. Rodrigues’ important work comes at a time when growing concern about the impacts of global climate change has sharpened debate about the future of the Amazon rainforest, particularly among informed Brazilians, who see its protection as much a challenge as an economic necessity and opportunity.



From left to right: Thomas Lovejoy,
Gomercindo Rodrigues and Paulo Sotero

The Brazilian government, which has long struggled to balance environmental protection with development, is under increasing pressure, both domestically and internationally, to proactively manage deforestation in the Amazon. As expanding agricultural exports and growing energy needs further complicate the country’s environmental policy, there is compelling evidence and growing recognition that the time for action is now. To highlight this pressing debate and consider Brazil’s policy choices, the Brazil Institute convened a discussion on September 12, 2007 featuring Rodrigues and biologist Thomas E. Lovejoy, who is President of The Heinz Center, member of the Institute’s Advisory Council and a pioneering scholar on Amazon biodiversity. In the article below, which is a product of the meeting at the Wilson Center, Rodrigues and Lovejoy explain how protecting the Amazon forest is not only critical for curbing climate change, but also for the long-term sustainability of Brazil’s emerging economy.

“The Amazon Rain Machine”

Thomas E. Lovejoy and Gomercindo Rodrigues

Oxygen isotopes and the rubber tappers’ struggle in Acre might seem to have little in common. Yet both are part of the future of the Amazon and of a significant portion of Brazilian agro-industry and hydro-electric power generation. Together they call for a major advance in Amazon policy.

As Chico Mendes was struggling to guarantee the future of the rubber tappers and the forest, one of Brazil’s very distinguished scientists, Eneas Salati, analyzed oxygen



isotope ratios in Amazon rain fall from the Atlantic to the Peru. His conclusion was incontrovertible: The Amazon makes a major portion of its own rainfall. The obvious implication was too much deforestation could degrade the hydrological cycle.

Today remote sensing imagery shows the hydrological cycle is not only essential to the maintenance of the great forest, but also provides a significant amount of the rain south of Amazonia, in Mato Grosso, Sao Paulo and even northern Argentina. When the cycle's westward-moving moisture reaches the high wall of the Andes, a significant portion is deflected south.

Much of the sugar, soybeans and other agro-industrial crops in those regions depend on the Amazon rain machine. So does an important part of Brazil's hydro-electric generation. The Brazilian economy cannot afford to lose the important contribution of the Amazon rain machine.

The major science and policy question is: How much deforestation will damage the rain machine? This complicated question defies a simple answer. But new research from INPE suggests the tipping point is about 40 percent deforestation. With current deforestation at about 20% that might seem far off.

Nonetheless, common sense indicates the time for action is now. The rain machine is subject to other factors independent of deforestation: the kind of drought caused by El Nino in 1997, and that driven by circulation changes in the Atlantic in 2005. Consequently the tipping point is very much closer to 20 percent than 40 percent. It makes no sense to discover that point by triggering the degradation of the rain machine.

Brazil should be congratulated on recent dramatic reduction (fifty percent from two years before) in deforestation rate, but that merely postpones when the rain machine will be undercut. The only sensible course is to move from a policy of reducing deforestation to stopping it altogether. This should be supplemented with aggressive reforestation. This does not mean the forest is untouchable, but rather as Chico Mendes and the rubber tappers showed us, that the uses of the forest should be compatible with maintaining it and its services, including the rain machine.

This can be achieved through additional resources from the global effort to control greenhouse gases. Roughly one fifth of the annual increase greenhouse gas concentrations in the atmosphere comes from the carbon released in deforestation. That makes Brazil one of the top half dozen emitters in the world. So it is in the interest of Brazil and the rest of the world to provide financial resources for "avoided deforestation". Such efforts should not diminish the imperative of creating a new energy basis for society; climate change is so urgent we need to tackle both energy and deforestation simultaneously.



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The moment is at hand to move that agenda forward at the United Nations General Assembly, at the Bali meeting of the Climate Convention and other meetings. The details to be resolved are best left to the nations involved. The principle, however, is clear: the great forest nations should be compensated for the global ecosystem service of keeping carbon in forests and out of the atmosphere. The added benefit for Brazil is the maintenance of the rain machine.

For this to work, the major portion of the compensation must go to the forest regions and particularly the communities in whose hands the future of the forests lies. This was the basic lesson that Chico Mendes and the rubber tappers taught us. Traditional peoples, the Amazon rain machine and the Brazilian economy share a major stake in the future of the great forest.