As Brazil's rain forest burns down, planet heats up

By Jack Chang | McClatchy Newspapers



Slash and burn agriculture is denuding the Amazon. | View larger image

TAILANDIA, Brazil — For more than a decade, Vigilio de Souza Pereira has carved his living out of the thick Amazon rain forest around his ranch in northern Brazil.

When Pereira needs more land for his crops and cattle, he cuts more virgin jungle and sets the vegetation ablaze. When the nutrient-poor soil has been depleted, he moves on and cuts down more jungle.

Such slash-and-burn agriculture has helped the 51-year-old Pereira and millions of other farmers and ranchers scratch out a living from the forest, but it's put Brazil at the heart of the environmental challenge of the century.

As vast tracts of rain forest are cleared, Brazil has become the world's fourth-largest producer of the greenhouse gases that cause global warming, after the United States, China and Indonesia, according to the most recent data from the U.S.-based World Resources Institute.

And while about three-quarters of the greenhouse gases emitted around the world come from power plants, transportation and industrial activity, more than 70 percent of Brazil's emissions comes from deforestation.

Burning and cutting the forest releases hundreds of millions of tons of carbon dioxide, methane and other gases that the vegetation had trapped. Those gases collect in the atmosphere, prevent heat from escaping and help raise the Earth's temperature.

Keeping greenhouse gases out of the atmosphere has become crucial to saving the planet from catastrophic climate change, scientists say. However, stopping the destruction of the vast Amazon rain forest means confronting the region's lawlessness and persuading Brazilians such as Pereira to leave the forest alone.

"Brazil has a huge amount of forest that's still there, and that means Brazil has a much greater role in terms of future deforestation," said Philip Fearnside, a research professor at Brazil's National Institute for Amazon Research. "Any changes that happen here have great influence on whether the Earth gets warmer."

The 1.5-million-square-mile Brazilian Amazon, larger than the entire nation of India, contains more than 40 percent of the world's rain forests, and about a fifth of it already has disappeared, mostly in an "arc of deforestation" along the forest's southern and eastern edges.

Every year, another chunk of forest the size of Connecticut or larger disappears as farmers, illegal loggers and others clear jungle, mostly without government approval. Violent clashes over land are common, as are murders of environmentalists.

Stopping the destruction means persuading people such as wood merchant Francisco de Assis to give up selling illegal lumber extracted from the rain forest around the northern Brazilian town of Tailandia.

The town, little more than a wide spot on the highway a decade ago, has grown into a 54,000-person city of sawmills, bars and hastily built shacks. It also has Brazil's seventh-highest homicide rate.

"This business is keeping people alive," de Assis said on a recent afternoon as he led potential buyers through just-cleared jungle. "But I don't think there'll be any wood left here in a few years."

The effects of the Amazon's continued destruction could be especially severe in southern Brazil, where much of the country's agriculture, industry and population is based. About 40 percent of the precipitation there comes from moisture evaporated off the rain forest's thick tree cover. Cutting back more of the Amazon could mean starving the area of water.

"The hydroclimatic cycle of the Amazon really depends on having forest there," said Thomas Lovejoy, president of the U.S.-based H. John Heinz III Center for Science, Economics and the Environment. "It's all rolled into one big picture, which in the end comes down to what happens to the forest."

Veteran diplomat Sergio Serra, who in April was named Brazil's first ambassador in charge of global warming issues, said his country is doing its part by, among other things, strengthening enforcement of environmental laws and creating vast forest reserves.

As a result, he said, the rate of deforestation in the Amazon dropped by about 50 percent from August 2004 to July 2006. Environmentalists said lower global prices for soybeans grown in the Amazon, as well as tougher enforcement, help explain the drop.

"Brazil is conscious of its responsibilities," Serra said. "We are already combating the problem with more vigor, and that led to this significant decline."

Convincing millions of people that they can make more money by leaving the trees alone than by cutting them down is key to saving more of the forest. Already, some farmers are cutting trees selectively and selling the wood as "green" lumber for multiples of the price they'd get for illegal wood.

Environmentalists say Brazil also could take part in an international market of carbon credits that would pay people not to cut down forest. Brazil's government opposes such a carbon market because it wouldn't reduce greenhouse gas emissions, Serra said.

Persuading agribusiness giants to stop buying soybeans and other crops grown on deforested land is also crucial, many said.

"The important thing that we want to show is that if you don't create economic stimulus for protection, it'll be very difficult to have any quick action," said Jose Heder Benatti, the president of a land management agency in the state of Para. "Because we live in a capitalist country, the market is a strong force for action."

Pereira, the farmer, said he was open to such ideas, although he hadn't yet seen how he could make as much money conserving his land as he does clearing it for cattle, soybeans and other crops.

Sticking to the status quo, however, isn't a solution, he said.

"If the forest doesn't exist anymore, our colony will end," he said. "Without the forest, there won't be any rain or any crops."

Any plan to crack down on deforestation, however, depends on the government's ability to enforce its laws, which farmers said is practically nonexistent in much of the jungle.

The federal government's environmental agency, for example, has only a third the number of inspectors it needs to do the job in Para, which is three times the size of California, said Anibal Picanco, the agency's superintendent in the state.

That means land owners such as Dario Bernardes who want to go green often find themselves at the mercy of the jungle's notorious lawlessness.

Bernardes tried switching to sustainable forestry in 1994 on his 57,700-acre ranch near Tailandia and even won certification from the international Forest Stewardship Council, meaning he could export the wood as higher priced, forest-friendly lumber.

All that untouched land, however, proved too great a temptation, and armed loggers poured in last year and devastated the property. Federal officials said they'd visited the area and seized illegal wood but couldn't stop the loggers from returning.

The business, which had employed about 300 people, all but shut down. Today, the ranch is like much of the deforested Amazon — an apocalyptic landscape of charred vegetation and tree stumps.

"We tried doing this the right way, but we received no support at all," Bernardes said. "If this continues, I don't give the Amazon 50 more years."

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