

Will dams on Amazon tributary wreak global havoc?

April 5 2009, By Tyler Bridges

The Xingu River, the largest tributary of the Amazon, runs wide and swift this time of year. Its turquoise waters are home to some 600 species of fish, including several not found anywhere else on the planet. A thick emerald canopy of trees hugs its banks, except in places where man has carved out pastures for cattle.

Now man, in the form of the Brazilian state power company, wants to harness a section of the Xingu by building the world's third-biggest dam.

Called the Belo Monte, the dam would drown 200 square miles of tropical rainforest -- an area equivalent to the sprawling city of Tucson, Ariz. -- and would flood the homes of 19,000 people. It would be only one of more than a dozen dams that the Brazilian government is planning to construct on tributaries of the Amazon, the world's mightiest river.

Belo Monte would be only the latest assault on the Amazon tropical rainforest, which is home to one in 10 of the world's known species and covers an area as large as the United States west of the [Mississippi River](#).

Stephan Schwartzman, the director of tropical forest policy at the Environmental Defense Fund, said that 18 percent of the Amazon, an area nearly two times the size of California, had been cleared since the mid-1960s.

He added that deforestation peaked in 2004 and has since declined because of falling beef and soybean prices and because the government

has stepped up enforcement of protected areas.

What happens to the Amazon rainforest has wide consequences, because a shrinking rainforest hampers the planet's ability to rid the atmosphere of carbon dioxide, a [greenhouse gas](#) that trees and other green plants absorb.

Brazilian government officials, however, say that Belo Monte and the other dams are necessary to switch on more living room lights, power expanding companies in the world's ninth-largest economy and create jobs as Brazil begins to slide into recession.

The impact of Belo Monte on the Indians who would be displaced is central to the dam's opponents. Under Brazil's Constitution, Indians must "be heard" when dams would affect their land, which potentially gives them veto power over new dams.

Environmentalists are organizing riverside dwellers to rise up against Belo Monte by describing how it would submerge their homes and land. They organized a meeting March 21 in the community that locals call Volta Grande, which in Portuguese refers to a curve in the Xingu known as the Big Bend.

It took place in a barnlike house on the banks of the Xingu, about an hour downriver by motorboat from Altamira, the closest city.

Euclides de Oliveira listened quietly in a portion of the home that had been converted into a makeshift classroom with a dirt floor.

De Oliveira, a wiry 32-year-old fisherman with a dark mustache, sat on a bench with his back to a wall on which schoolwork covered the wooden planks. He wore a T-shirt and flip-flops, like most everyone else there.

The heat was stifling, and everyone swatted at the mosquitoes as activists described an unhappy future.

"What you say makes me afraid," de Oliveira said when he finally spoke up. "It will end our way of life."

Environmentalists emphasize the bigger picture, that Belo Monte would increase global greenhouse gases by devastating the rainforest and by releasing the methane gas stored in river vegetation. They add that the Xingu's low level during the dry season would force the government to build five more dams to regulate the water flow.

Some critics even say that dams such as Belo Monte could become white elephants if global warming dries up parts of the Amazon, as some computer models suggest.

Instead of building dams, a World Wildlife Fund-Brazil analysis found, the government could meet the country's energy needs by upgrading existing energy systems and pushing for the rapid development of wind, solar and biomass. In one example, the study reported that Brazil loses 16 percent of the power it generates through an old and faulty distribution system, compared with an international rate of about 6 percent.

Brazilian President Luiz Inacio Lula da Silva has won plaudits worldwide for his role in pushing for Brazilian cars to switch from gasoline to cleaner ethanol produced from sugarcane.

However, Lula has continued to champion big energy projects that create jobs, devastate the rainforest and produce campaign contributions to his Workers Party from big construction companies.

He also has said pointedly: "The Amazon belongs to Brazilians."

Lula provided crucial support for two controversial dams that are under construction on the Madeira River, in the western Amazon.

Belo Monte would be built in the heart of Para, a state that's home to an explosive mix of poor settlers, cattle ranchers, loggers and scammers who fake land titles.

The latter are known as "grileiros." They draw up backdated land deeds and put them in a drawer full of crickets, "grilos" in Portuguese. The crickets secrete acids that yellow the deeds and allow the scammers to pass them off as years older.

In 2005, a gunman in Para hired by a wealthy rancher shot and killed Dorothy Stang, an American nun who'd fought the powerful on behalf of the landless.

A sign of the tension over Belo Monte came at a public meeting in Altamira last May.

There, Indians in feathers and war paint clubbed and slashed an electric company executive. After the bloody executive was led away, the Indians danced in celebration, waving their machetes.

"It was a shocking and regrettable act," said Glenn Switkes, the Brazil-based representative of International Rivers, a California-based nonprofit group. "But it defines what's at stake and shows that the determination and resistance by indigenous people is likely to be strong."

Bishop Erwin Krauter has 24-hour police protection because of death threats for opposing the dam and butting heads with the powerful ranchers association.

"The dam will have an irreversible impact," Krauter said in his

residence in Altamira.

He has some hope that the government won't advance the dam after he met with Lula on March 19 and got the president to agree to meet with opponents in late April.

Business and political leaders in Altamira support Belo Monte because of the development it will bring.

"With the dam, we'd have more income to improve infrastructure," said Altamira's mayor, Odileida Sampaio. She hopes that the dam will produce money to pave 600 miles of the Transamazon highway and connect Altamira to the city of Maraba to the east.

Altamira's streets were paved only five years ago. Its population has doubled in the past 20 years to 62,000, but it retains a small-town feel. It has two stoplights, and all its telephone numbers have the same prefix.

Sampaio and others in Altamira fear that the expected influx of job seekers would overwhelm the city's ability to handle them.

"The population of Altamira will double in three or four years," said Silverio Fernandez, Altamira's deputy mayor.

Sampaio said the company that wins the project to build the dam must pay for new roads, schools, health clinics and houses.

She said she'd heard that an avalanche of unemployed workers flooded Tucuruí when a massive dam was built on the Tocantins River, east of Altamira, during the 1970s.

The debate over whether to build dams in the Amazon isn't new. Opponents stopped one massive dam planned for the Amazon in 1989.

It was an earlier version of Belo Monte. A coalition of U.S.-based environmentalists, Brazil's Kayapo Indians and the star wattage of Sting, who shone an international spotlight, prompted the World Bank to withdraw needed loans.

Jose Antonio Muniz remembers that episode.

Now the president of Eletrobras, the gigantic state power company, Muniz showed a 1989 magazine article to a visitor to his Rio de Janeiro office. The article featured a photo of a Kayapo Indian placing a hunting knife against Muniz's left cheek in Altamira. It was a friendly warning not to mess with the indigenous people.

Belo Monte now is a kinder and gentler dam, Muniz said.

"It's the best site in the world for a dam," he said during an hourlong interview. "It will produce a lot of energy and have a minimal impact on people and the environment."

Eletrobras submitted its environmental impact statement on Feb. 27 to Brazil's environmental agency. It has yet to be made public.

Muniz said he expected to win approval to let construction bids in October and begin work on Belo Monte next year. The dam would cost \$10 billion and wouldn't open until 2014 at the earliest.

Muniz said the government had learned from its mistakes and was taking many steps to protect the environment and minimize the impact on indigenous peoples. He promised to compensate those affected, even those without land titles.

"Brazil needs dams if it wants to become a developed country," Muniz said. "It is a clean form of energy."

Opponents, who've already won several court orders halting the project temporarily, hope that the courts will reject it because of the damage it will do to indigenous people and the rainforest.

At the meeting March 21, about 70 people gathered at one of the riverside dwellings in Volta Grande. It was the home of Fernando Florencio de Sousa, who grows cacao, coffee, rice, corn and yucca on 600 acres that abut the Xingu River.

Officials from the electric company have visited the area four or five times.

"They promise us that we'll have a much better life," de Sousa said, "that we'll have electricity, running water and live in a nice house. I don't believe it."

Antonia Melo, an activist for a nonprofit group called Xingu Lives, which organized the meeting, showed an hourlong documentary on the destruction and failed promises of the Tucuruí and Madeira River dams. Afterward, she and Ignez Wenzel, a nun from Altamira, taught the group a chant against Belo Monte.

A stout man in a red baseball cap named Liro Moraes, who'd been silent for most of the meeting, recalled a recent meeting with electric company officials.

"They only talk about the good things," said Moraes, 51, his voice rising. "We shouldn't let them into our communities anymore!"

Everyone burst into applause and began chanting, "Down with Belo Monte."

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