

After the earthquake: Haiti's deforestation needs attention

As Haiti is rebuilt after the earthquake, attention should be paid to its environmental problems, especially deforestation.



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Ever since a 7.0 magnitude earthquake hit Haiti a week ago — the most powerful to strike in 200 years — stories of the extraordinary damage and suffering wrought by the disaster have dominated airwaves and front pages around the country. The coverage and the outpouring of aid that followed have, for the time being, focused international attention on the country's poverty and vulnerability to disasters just like this, hopefully to lasting effect.

But somewhat overshadowed in all this activity is one of Haiti's longer term, but nonetheless serious, problems.

The island nation suffers from one of the highest rates of deforestation in the world. This is troubling for a number of reasons. The loss of nearly all its trees promises to amplify how dramatically earthquakes, hurricanes, and other periodic natural occurrences impact Haitians, to say nothing of deforestation's impoverishing legacy of erosion and climate change on local scale (less moisture). Without trees holding the soil in place, a heavy rain — let alone a hurricane or an earthquake — can easily cause mudslides on the island's steep slopes.

Haiti and the Dominican Republic share the same island in the Caribbean — Hispaniola. Both countries are at the same latitude and, generally speaking, the same climatic conditions

prevail.

But one country, the Dominican Republic, has lush forests. The other, Haiti, is almost completely brown and bare. The stark difference is visible from high above — one side green and full of foliage, the other bare.

Here's a photo from NASA and another from a National Geographic story in the 1980s.

Fewer than 100,000 acres of forest remain in Haiti, a country that was three-quarters tree-covered when European explorers first arrived 500 years ago. The nation, the poorest in the Western Hemisphere, has lost perhaps 98 percent of its tree cover, one of the worst cases of deforestation in the world.

By most accounts, cooking fires are the major culprit behind the nation's loss of trees. Haitians use trees as fuel either by burning the wood directly, or by first turning it into charcoal in ovens. Seventy-one percent of all fuel consumed in Haiti is wood or charcoal, according to the US Agency for International Development.

Every year, the country's 9 million (and growing) inhabitants burn a quantity of wood and charcoal equal to 30 million trees, according to this essay. That's 20 million more trees than Haiti grows yearly.

The Dominican Republic largely put a halt to this practice by banning it outright, and then by subsidizing propane fuel as a substitute. According to Greenwire, however, an illegal charcoal trade is thriving along the border of the two countries. Charcoal cartels have cut down trees on the Dominican side for sale on the Haitian side. (In December, three people were killed on the Dominican side in a charcoal trade-related dispute.)

The loss of trees and their roots has led to widespread erosion. Some 36 million tons of valuable topsoil is swept away yearly, according to the United Nations. Some ends up in waterways. Silt influx has raised the level of Lac Azuei, for example, by a number of feet, reports Greenwire:

Rapid erosion caused by deforestation is spilling large quantities of silt into Lac Azuei, raising lake levels and flooding the road connecting Port-au-Prince to Malpasse. The original road already lies 2 feet below the water line, but the government has been piling sand on top of it to keep the critical passage open. The lake is rising still.

National Geographic reports that the extensive deforestation will likely exacerbate the negative impacts of the recent earthquake. When the ground moves and there's nothing holding the loose earth in place, landslides become a greater threat.

Indeed, in 2004, when a storm hit Hispaniola, the death toll was relatively low in the Dominican Republic. But in flood- and mudslide-prone Haiti, more 3,000 people died.

This Associated Press article chronicles another effect of deforestation: less moisture for growing crops. Said one farmer, "Dew allows us to grow cabbage, potatoes and beans but we can't grow anything else anymore."

In 2003, The Los Angeles Times faulted unregulated construction and irrigation practices for the country's erosion problem. The story also points out that 70 percent of Haitians are unemployed. For them, the charcoal trade, however environmentally damaging, is the only way to make a living.

Here's a first-person account of environmental changes in one lifetime:

I was born and grew up in a small village in southern Haiti. I thought I was living in a paradise when I was young. Although there were no angels flying around, I could see many different types of birds, within just a one-minute walk from my house I could see three flowing rivers, the mountains were green and the people had enough

food to eat.

Years later, the author returns to his village. He writes:

When I visited my village in 1980 (the last time), it was all brown. No vegetation. Most of the trees I used to see as a boy had been cut down. The birds had left the village. No place to build their nests or for them to rest. No rainfall. The rivers were almost all dried out. My neighbors had moved to other areas. Some had gone to Port-au-Prince for a better life; many people I knew (young and old) had died. My village is like a desert and I believe this same dynamic has occurred in many other places in Haiti.

So what to do? A recent article suggests a few approaches. One possibility: a jatropha tree that can be converted into biofuels (no more importing diesel for electricity generation) and fuel for cooking. Another possibility, making briquettes from recycled paper for use as fuel.

But there are obviously more systemic problems. Poverty coupled with population growth are two factors driving Haiti's deforestation. If Haitians had fuel besides wood or charcoal to cook with, they'd probably use it. (This approach worked in the Dominican Republic.) If they had employment opportunities other than the charcoal trade, which supplies a meager income at best, they'd probably jump on it.

As The New York Times' Nicholas Kristof writes, there are legitimate concerns over aid dependency in Haiti, not to mention what he calls the country's "lousy" leadership and governance. But, because of its location — close to the US — Haiti should invite investment, he says. We need to "set broken bones" and "dig people out of rubble" right now, he declares, but development of the nation's infrastructure and economy is the real solution for the long term.

Editor's note: For stories, blogs, and updates on Haiti after the earthquake, go to the Monitor's Haiti topic page.

The Monitor's Environment section has a new URL. And there's also a new URL for our Bright Green blog. We hope you'll bookmark these and visit often.

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