



Logs are piled up ready to be transported to a pulp and paper processing plant as natural forest is seen on the right, in Pangkalan Kerinci, Riau province, on Sumatra island, Indonesia. (photo: Dita Alangkara/AP)

We're Cutting Down One of Our Best Defenses Against Global Warming

By Katie Valentine, ThinkProgress, 22 April 16

Forests, it's long been known, are key players in the fight against climate change, pulling carbon dioxide from the atmosphere and storing it in their roots, branches, and surrounding soil. But it's also long been known that forests around the world aren't receiving the protection they need to ensure that they keep up this crucial service.

Now, a new [report](#) has quantified just how much time protecting forests will buy us in our efforts to mitigate climate change. The report, published Thursday by the Woods Hole Research Center, found that "aggressive management" of tropical forests in particular would give the planet 10 to 15 more years in which to reduce emissions enough to keep the world at 2 degrees Celsius — the point under which climate scientists agree warming should be kept to avoid the worst consequences of climate change.

Right now, the report found, tropical forests release 1.2 pentagrams of carbon per year (or 1.2 billion metric tons) through deforestation. As forests are cut down or burned to make way for agriculture and development, they [release](#) the carbon they were storing back into the atmosphere. These emissions from forests are cutting into the world's carbon budget. If we keep up our present rates of deforestation — rates that are [slowing worldwide](#) but are still leading to huge forest losses in some continents

— we'll have about 19 years to bring emissions under control enough to keep warming to 2 degrees. But, if we were able to halt forest loss and degradation, we'd have about 33 years to scale down our fossil fuel use.

Stopping all forest degradation and destruction is, of course, a best-case scenario, said Philip Duffy, president and executive director of Woods Hole and one of the authors of the report. It's also not likely to happen anytime soon. But that was the point of the report, he said: to give a benchmark of what could happen in a best-case scenario world.

"What we actually considered there is quite idealized, meaning it's a best-case scenario, in that it represents everything we think can be obtained by managing tropical forests," he told ThinkProgress. "What we're illustrating is the biophysical potential."

A more realistic scenario would be reducing forest loss by implementing better economic incentives, Duffy said. The programs that are in place right now, like [REDD](#) (Reducing Emissions from Deforestation and forest Degradation) and the Green Climate Fund, should be fully funded, he said. And in general, deforestation needs to be a bigger part of the climate change conversation.

“This should be part of the toolbox much more than it is,” he said. “That’s particularly true for developing countries, but it’s also true for developed countries.”

Another [paper](#), released alongside the Woods Hole report, makes the case that giving indigenous people more rights would lead to better conservation of forests. The report, published by the Rights and Resources Institute, states that indigenous communities “have customary rights to a large portion of the world’s remaining tropical forests, as well as millions of hectares of degraded forests that could capture additional carbon through restoration.” Even by conservative estimates, it’s thought that 20 percent of the carbon stored in tropical forests is claimed by indigenous people in Indonesia, Amazonia, Mesoamerica, and the Democratic Republic of the Congo. But very few of these communities actually have legal ownership of these forests. If they did, the report states, it would be good news for the climate.

“Research shows that when [indigenous communities] have legally recognized and enforceable rights, both deforestation and carbon emissions can be significantly lower compared with areas outside of community forests,” the report reads. “For example, community and indigenous forests in Brazil store 36 percent more carbon per hectare, and emit 27 times less carbon dioxide from deforestation than forests not under community control.”

Of course, convincing countries to hand over land rights to indigenous and local peoples isn’t easy. But the report says that indigenous rights should at least be a bigger part of the international effort to combat climate change. Right now, according to the report, there are strikingly few “measurable goals” to improve land rights for indigenous people. That needs to change if forest protection is to be taken seriously, the report claims.

These reports come amid recent data showing that some tropical countries saw “[alarming](#)” rates of tree loss in 2014. A study published last September found that in 2014, the planet lost more than 45 million acres of tree cover, and that tree cover loss in tropical countries accounted for more than half that total. This tropical tree cover loss is associated largely with agriculture: Forests are being destroyed to make room for rubber, soy, and palm plantations, as well as for cattle. There is some good news on the deforestation front, though: Indonesia [announced](#) last week that it was putting a moratorium on new permits for palm oil plantations — an industry that already takes up an area twice the size of Belgium in Indonesia. And overall, deforestation rates [may be slowing](#): tree loss contributed 3.2 billion tons of carbon dioxide every year between 2011 and 2015, according to the U.N. Food and Agriculture Organization, a

measurement that’s fallen by about a quarter since the previous decade.

Still, the world needs to act fast, Duffy said — especially since countries in Paris agreed to strive to limit warming to 1.5 degrees Celsius, not 2 degrees.

“It comes down to in the end that you’ve got to find a place to put a large quantity of carbon,” he said. “Where are you going to put it? Putting it in the land, or putting it into the biosphere, is a safe option.”