



Deforestation accounts for almost a fifth of global greenhouse gas emissions as trees, which store carbon, release it when they are burned during forest clearances. (photo: ALAMY)

In the Fight to Stop Climate Change, Forests Are a Vital Weapon

By Frances Seymour, Guardian UK, 07 October 15

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Forests are undervalued assets in meeting the twin global challenges of our time: achieving prosperity and safeguarding climate stability. It's time we gave them the attention – and finance – that they deserve.

Last week, dozens of countries announced a late-breaking wave of commitments to reduce greenhouse gas emissions ahead of the climate change summit in Paris this November. While such pledges are welcome, they are not yet sufficient to avert catastrophic global warming. Tropical forests provide an opportunity to close the gap.

When tropical forests are cut and left to decay or are burned, as happened on an area almost twice the size of Costa Rica last year, the carbon stored in leaves, branches, trunks, roots and soil is released into the atmosphere. For many forest-rich developing countries, deforestation, not fossil fuel use, is the major source of emissions. If tropical deforestation were a country, it would rank somewhere [between China and the European Union](#) as a source of current

annual greenhouse gas emissions. So halting deforestation would be a giant step toward taming climate change.

That's not all. Standing forests soak up carbon into vegetation and soil, providing a safe and natural Carbon Capture and Storage (CCS) technology. If we were to stop tropical deforestation tomorrow, allow damaged forests to grow back, and protect mature forests, the resulting reduction in emissions and removal of carbon from the atmosphere could equal up to [one-third of current global emissions](#) from all sources.

The good news is that climate negotiators have already agreed on a way to make this happen. It's called Reducing Emissions from Deforestation and forest Degradation or REDD+, in which rich countries reward developing countries for reducing deforestation on a pay-for-performance basis. Many developing countries have indicated that they would be willing to reduce emissions further in return for international financial support. Rich countries could do more to fight climate change at lower cost by

financing tropical forest conservation in addition to their own domestic emission cuts. The few REDD+ agreements already in place have priced avoided CO2 emissions at [only \\$5 per ton](#), truly a bargain compared to most other options.

In addition to mitigating the emissions that cause climate change, conserving tropical forests contributes to development in myriad ways. New science [suggests](#) that forests support agriculture by regulating weather at continental scales, in addition to the shade, forage, and pollination they provide to adjacent farms. This means that deforestation of the Amazon rainforest threatens to deny rainfall to faraway crops in Brazil's agricultural heartland. Forested watersheds fill reservoirs behind hydroelectric dams and extend their lives by controlling erosion, ensuring that millions of people have access to modern energy. And all these services are in addition to the harvest of timber and non-timber forest products such as charcoal, which provide, on average, [one-fifth of household incomes](#) in communities that live in and around forests.

Moreover, poor countries and poor people in those countries will be the biggest losers from climate change. A single tropical storm, such as Typhoon Haiyan that slammed into the Philippines two years ago, can knock a country off its economic growth path for decades. And the poorest households, whose health, livelihoods, and housing are already precarious, have the fewest resources to adapt to change or recover from natural disasters. Intact forests are more resistant to the impacts of extreme weather events, such as the landslides that follow heavy rains and the forest fires that follow dry spells in Indonesia. Maintaining the flows of goods and services from forests is critical to buffering the impacts of climate instability on those least able to withstand them.

There's one more reason invest more in tropical forest conservation: preliminary evidence [suggests](#) that REDD+ initiatives can help improve governance and the rule of law. In both Brazil and Indonesia, national efforts to reduce deforestation have been associated with greater transparency, increased law enforcement targeted at forest-related crime and corruption and steps to strengthen the land rights of indigenous peoples. A broad coalition of governments, multinational corporations, non-

governmental organizations and indigenous groups recognized these potential benefits in the September 2014 New York Declaration on Forests.

Rich countries should think about paying for forest services as a utility. We are willing to pay electric bills in return for keeping the lights on; we should be willing to pay for tropical forest conservation as one way to ensure climate stability, while also promoting development benefits. But so far, rich countries have only pledged about a billion dollars per year for REDD+. Americans spend 20 times that amount on pet food. We can do better than that. And we should.