

TECH2

Brazil's Amazon forest released more CO2 than it absorbed over the last decade: study

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The Brazilian Amazon released nearly 20 percent more carbon dioxide into the atmosphere over the last decade than it absorbed, according to a stunning report that shows humanity can no longer depend on the world's largest tropical forest to help absorb manmade carbon pollution. From 2010 through 2019, Brazil's Amazon basin gave off 16.6 billion tonnes of CO₂, while drawing down only 13.9 billion tonnes, researchers reported Thursday in the journal *Nature Climate Change*. The study looked at the volume of CO₂ absorbed and stored as the forest grows, versus the amounts released back into the atmosphere as it has been burned down or destroyed.



"We half-expected it, but it is the first time that we have figures showing that the Brazilian Amazon has flipped, and is now a net emitter," said co-author Jean-Pierre Wigneron, a scientist at France's National Institute for Agronomic Research (INRA).

"We don't know at what point the changeover could become irreversible," he told *AFP* in an interview.

The study also showed that deforestation — through fires and clear-cutting — increased nearly four-fold in 2019 compared to either of the two previous years, from about one million hectares (2.5 million acres) to 3.9 million hectares, an area the size of the Netherlands.

"Brazil saw a sharp decline in the application of environmental protection policies after the change of government in 2019," the INRA said in a statement.

Brazilian President Jair Bolsonaro was sworn into office on 1 January 2019.

Terrestrial ecosystems worldwide have been a crucial ally as the world struggles to curb CO₂ emissions, which topped 40 billion tonnes in 2019.

Over the last half-century, plants and soil have consistently absorbed about 30 percent of those emissions, even as they increased by 50 percent over that period.

Oceans have also helped, soaking up more than 20 percent.

The Amazon basin contains about half of the world's tropical rainforests, which are more effective at soaking up and storing carbon than other types of forests.

If the region were to become a net source rather than a "sink" of CO₂, tackling the climate crisis will be that much harder.

Using new methods of analysing satellite data developed at the University of Oklahoma, the international team of researchers also showed for the first time that degraded forests were a more significant source of planet-warming CO2 emissions than outright deforestation.

Over the same 10-year period, degradation — caused by fragmentation, selective cutting, or fires that damage but do not destroy trees — caused three times more emissions than outright destruction of forests.

Source: <https://www.firstpost.com/tech/science/brazils-amazon-forest-released-more-co2-than-it-absorbed-over-the-last-decade-study-9586751.html>