

# 55 percent of carbon in Amazonian indigenous territories and protected lands may be at risk

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A new peer-reviewed study, released today at the start of the UN climate conference in Peru, reveals the unprecedented amount of carbon stored within the nine-nation network of Amazonian indigenous territories and protected natural areas. Accepted for publication in *Carbon Management*, the paper entitled, "Forest Carbon in Amazonia: The Unrecognized Contributions of Indigenous Territories and Protected Natural Areas," suggests that protecting the vast amount of carbon stored above ground in the forests of indigenous and protected lands - totaling 55% of the Amazon - is critical to the stability of the global climate as well as to the cultural identity of forest-dwelling peoples and the health of the ecosystems they inhabit.

"We see, for example, that the territories of Amazonian indigenous peoples store almost a third of the region's aboveground carbon on just under a third of the land area," said Woods Hole Research Center (WHRC) scientist Wayne Walker. "That is more [forest](#) carbon than is contained in some of the most carbon-rich tropical countries including Indonesia and the Democratic Republic of the Congo."

Yet the authors also find that nearly 20% of tropical forests across Amazonia are at risk from legal and illegal logging, construction of new roads and dams, and the expansion of commercial agriculture, mining, and petroleum industries, pressures which are exacerbated in many countries because governments have failed to recognize or enforce

indigenous land rights.

"We have never been under so much pressure, as this study demonstrates," said Edwin Vásquez, co-author and president of COICA, the Indigenous Coordinating Body of the Amazon Basin, which represents indigenous groups in the region. "Yet we now have evidence that where there are strong rights, there are standing forests. And knowing that we have more than half of the region's carbon on indigenous and protected lands, we can tell our leaders so they can strengthen the role and the rights of indigenous forest peoples.

The paper is the result of a novel north-south collaboration among scientists, Amazonian indigenous and NGO networks, and environmental policy experts who combined satellite measurements of carbon density, field data and boundary records of indigenous territories and protected areas. "Until recently, an analysis of this scope would not have been possible; however, the availability of consistent and accurate spatial data across large areas like the Amazon has made a tremendous difference," according to scientist Alessandro Baccini also of WHRC.

The Amazon is comprised of 2,344 indigenous territories and 610 protected areas, spread across nine countries. These areas are exceptional in terms of biological, cultural and linguistic diversity. They are also considered the cornerstone of Amazon conservation efforts, since they serve as social and natural barriers to the advance of agriculture and forest fires. In countries such as Brazil, with historically high levels of deforestation, indigenous forests and protected areas are seen as vital to combating carbon dioxide emissions from deforestation and forest degradation.

"This means that international recognition and investment in indigenous and protected areas are essential to ensuring their continued contribution to global climate stability," said Richard Chase Smith, of Peru's Instituto

Bien Comun. Smith also noted that social conflict in Peru and other Amazonian countries would continue to escalate if governments failed to ensure secure land tenure for their indigenous peoples.

"If all the current plans for economic development in the Amazon are actually implemented, the region would become a giant savanna, with islands of forest," said Beto Ricardo, of the Instituto Socioambiental (ISA) of Brazil. "A vast proportion of indigenous territories and protected areas are increasingly at risk, with potentially disastrous consequences, "including 40% of the indigenous territories, 30% of the protected areas, and 24% of the area that pertains to both."

In summarizing the implications of their study, the authors conclude that in the near term, maintaining the stability of the atmosphere, together with the range of globally significant environmental and social services provided by Amazonian forests, will depend on whether governments choose to adopt policies that ensure the ecological integrity of indigenous territories and protected areas. Continued destruction of these carbon-rich ecosystems will gradually diminish their ability to function properly, the study says, resulting in a detrimental and potentially irreversible impact on the atmosphere and the planet.

"The solution is to recognize the rights of indigenous peoples to territories that have not yet been officially recognized, and resolve territorial conflicts that pit [protected areas](#) against private interests," said tropical forest policy expert Steve Schwartzman of the Environmental Defense Fund (EDF).

Provided by Woods Hole Research Center

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