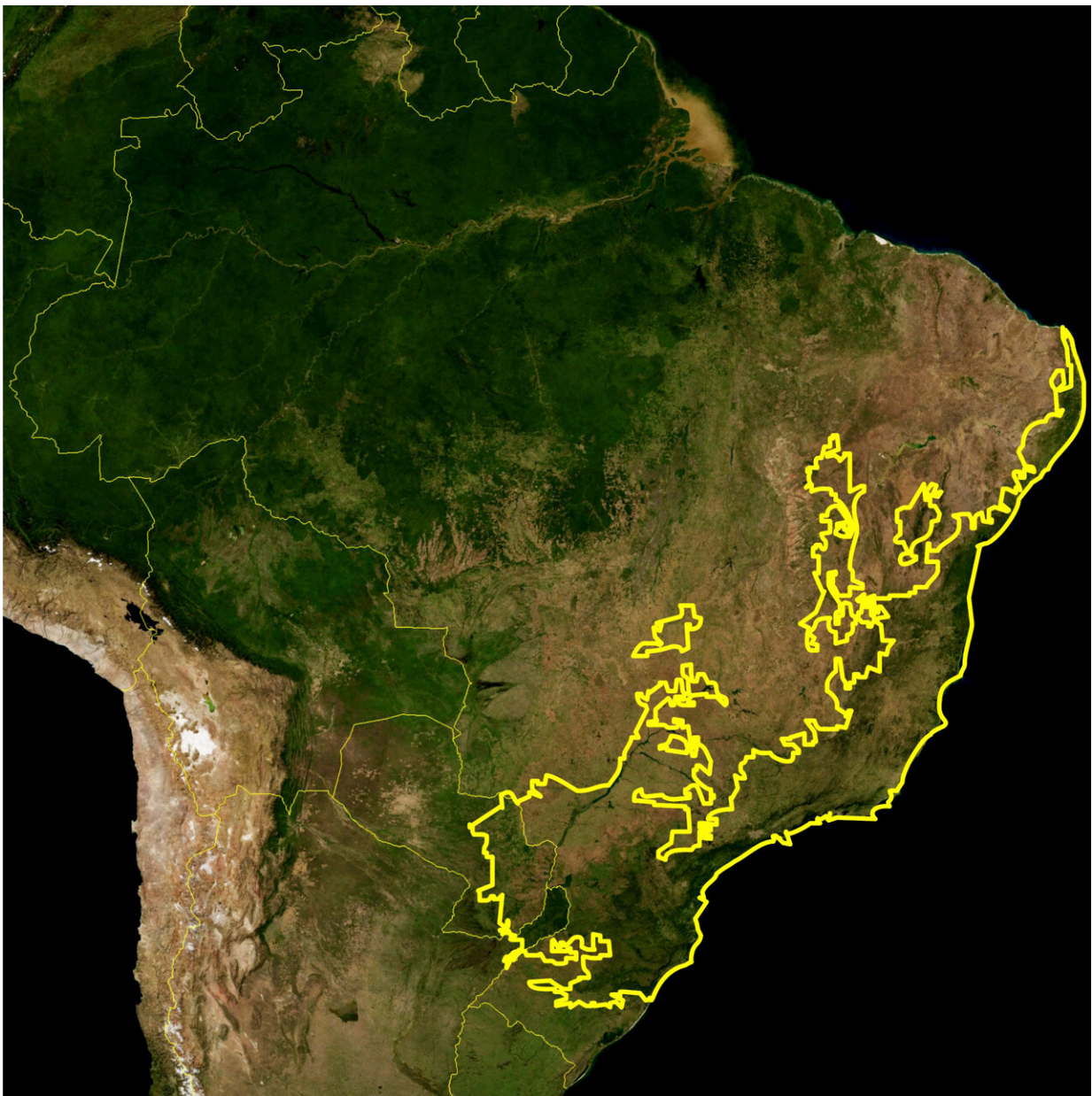


Indigenous communities with strong territorial rights can resist land grabs in Brazil's fragmented Atlantic Forest

January 26 2023



Location map of the Atlantic Forest biome — in Brazil, Argentina, and Uruguay. The yellow line encloses Atlantic Forest — as delineated by the WWF. Credit: Public Domain

A new study published today in *PNAS Nexus* revealed for the first time that Indigenous peoples, with officially recognized rights to their territories in Brazil's embattled Atlantic Forest, reduced deforestation and improved forest cover, outperforming territories that lack formal tenure.

"Our findings contribute to an environmental argument for recognizing the legal land rights of Indigenous peoples in the Atlantic Forest of Brazil, an area that has faced such high development pressures—from urbanization, mining, agriculture, logging and other types of economic development," said Dr. Rayna Benzeev, a postdoctoral researcher at University of California Berkeley who carried out her research while a doctoral student in the Department of Environmental Studies at the University of Colorado Boulder.

The new paper was released as pressure grows on President Luiz Inácio Lula da Silva, or Lula, to deliver on election promises to roll back policies that have weakened environmental protections and violated the constitutional rights of Indigenous peoples in Brazil.

Brazil's second largest rainforest, the Atlantic Forest, covers around 90,000 km² and spans 3,000 km of the Atlantic Coast. What remains of the biome is found in [rural communities](#), as well as large urban centers, including Rio de Janeiro, Florianópolis and São Paulo.

Deforestation in the Atlantic Forest biome has been prevalent since the early 16th century and rates were highest during the past two centuries, Benzeev said. "In contrast, deforestation in the Amazon started to intensify in the 1970s and more recently escalated again during the Bolsonaro Administration.

"There has been much international attention and conservation funding directed towards the Amazon, while the Atlantic Forest is in some ways more threatened. It is also a biodiversity hotspot and a top priority ecosystem for reforestation," Benzeev said.

An estimated 80% of the Amazon remains standing, while less than 12% remains of the Atlantic Forest. The region has therefore become a significant focus for reforestation efforts and a source of lessons learned for other reforestation movements around the world.

To conduct their research, Benzeev and her co-authors looked at 129 Indigenous territories in the Atlantic Forest and found less deforestation and increased reforestation on lands where Indigenous peoples have formal tenure rights, in marked contrast to Indigenous territories where communities lack rights or are merely in the process of being granted formal tenure.

Previous research has established the importance of Indigenous land rights in forest conservation efforts, especially in the Amazon rainforest.

"Strengthening the self-determination rights of Indigenous peoples—rather than allowing invasions of their ancestral lands—has now been shown to be important across the globe," Benzeev said.

Indigenous peoples and role in reforestation in Atlantic Forest

[A recent paper](#) describing successful conservation initiatives in the Atlantic Forest suggests Indigenous peoples have been absent from traditional conservation initiatives in the Atlantic Forest. Benzeev's paper reveals that forest protection and reforestation on Indigenous territories in the Atlantic Forest biome could contribute to conservation initiatives in the region.

"Our paper shows that each year after tenure was formalized there was a 0.77% increase in [forest cover](#), compared to untenured lands, on average—which can add up over decades," Benzeev said, noting the findings could strengthen global efforts to conserve the vulnerable biome that extends across 17 states and has been named a [biodiversity hotspot](#) by UNESCO.

"In a biome that has become a model ecosystem for reforestation efforts, it will be important to acknowledge the role of Indigenous peoples in [forest](#) protection and reforestation," Benzeev said. "What support might be needed for Indigenous peoples to continue to maintain forested areas for the long term?"

Land claims virtually paralyzed in recent years

Currently, demarcation appears to have stalled for many Indigenous communities that had begun the lengthy process of demanding formal land tenure over their ancestral lands, a right granted under the country's 1988 Constitution.

In fact, since 2012, only one Indigenous territory in the study sample had successfully been granted demarcation.

Of the 726 Indigenous territories submitted to the pipeline for demarcation, 122 remain at the first stage of the process and approved to undergo an investigation by anthropologists; 44 territories are at stage

two, which means they have been granted initial approval by FUNAI—the Brazilian National Indian Foundation; 74 are in the third stage of the process—they have been labeled "declared," but not approved by presidential decree, which is the fourth stage that leads to demarcation. In fact, in the study sample, only one Indigenous territory since 2012 had undergone all the steps necessary for demarcation.

The Brazilian president has moved quickly to reverse his predecessor's [development-first policies](#), which have included efforts to open Indigenous territories to mining. Brazil has some of the better legal protections [on paper](#) for Indigenous rights globally, but failure to enforce its laws, and lack of funding for enforcement agencies, has fueled deforestation.

Dr. Peter Newton, Associate Professor in the Department of Environmental Studies at the University of Colorado Boulder, and co-author on the paper, noted that many indigenous and other traditional communities who live in and around tropical forests depend heavily on those forests, including for subsistence and for income-generation.

"As such, these communities often have a strong incentive to conserve and restore forests," Newton said. "Institutional support and legal recognition can help them protect forests more effectively."

The new findings from the Atlantic Forest expand the current body of research on tenure rights to cover this ancient biome, revealing that once Indigenous territories are demarcated the evidence shows a clear environmental benefit, according to Dr. Marcelo Rauber, a co-author of the PNAS Nexus paper.

"Our study contributes to an emerging body of evidence suggesting that rights-based policy for Indigenous lands can improve environmental outcomes," said Rauber, a post-doc researcher at the National Museum

of the Federal University of Rio de Janeiro. "Known in Brazil as demarcação, the legal recognition of Indigenous Peoples' land rights provides Indigenous Peoples with territorial autonomy, which support efforts to address longstanding human rights violations, land grabs, biodiversity loss and climate change."

More information: New study is first to reveal that Indigenous communities with strong rights to their territories can resist land grabs and better protect and reforest their lands in Brazil's fragmented Atlantic Forest, *PNAS Nexus* (2023). [DOI: 10.1093/pnasnexus/pgac287](https://doi.org/10.1093/pnasnexus/pgac287)

Provided by University of Colorado at Boulder

Citation: Indigenous communities with strong territorial rights can resist land grabs in Brazil's fragmented Atlantic Forest (2023, January 26) retrieved 20 June 2024 from <https://phys.org/news/2023-01-indigenous-communities-strong-territorial-rights.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.