

'Deforestation-free' supply chain pledges have barely impacted forest clearance in the Amazon

October 27 2022



Credit: Pixabay/CC0 Public Domain

More companies must make and implement zero-deforestation supply chain commitments in order to significantly reduce deforestation and

protect diverse ecosystems, say researchers.

Corporate pledges not to buy soybeans produced on land deforested after 2006 have reduced tree clearance in the Brazilian Amazon by just 1.6% between 2006 and 2015.

This equates to a protected area of 2,300 km² in the Amazon rainforest: barely the size of Oxfordshire in the UK.

The findings, made by tracing traders' soy supplies back to their source, are published today in the journal *Environmental Research Letters*. The work involved a team from the University of Cambridge, Boston University, ETH Zurich and New York University.

The researchers also discovered that in the Cerrado, Brazil's tropical savannah, zero-deforestation commitments have not been adopted effectively—leaving over 50% of soy-suitable forests and their biodiversity without protection.

Brazil has the largest remaining tropical forests on the planet, but these are being rapidly cleared to rear cattle and grow crops including soybean. Demand for soy is surging around the world, and an estimated 4,800 km² of rainforest is cleared each year to grow soybeans.

The majority of soy is consumed indirectly by humans: soybean is widely used as feed for factory-farmed chickens, pigs, fish and cattle. It also accounts for around 27% of global vegetable oil production, and as a complete protein source it often forms a key part of vegetarian and vegan diets.

By 2021, at least 94 companies had adopted zero-deforestation commitments—pledging to eliminate deforestation from their supply chains. But the study revealed that many of these commitments are not

put into practice.

And the researchers say that adoption of zero-deforestation commitments is lagging among small and medium sized food companies.

"Zero-deforestation pledges are a great first step, but they need to be implemented to have an effect on forests—and right now it's mainly the bigger companies that have the resources to do this," said Professor Rachael Garrett, Moran Professor of Conservation and Development at the University of Cambridge Conservation Research Institute, a joint senior author of the report.

She added, "If soybean traders actually implemented their global commitments for zero-deforestation production, current levels of [forest clearance](#) in Brazil could be reduced by around 40 percent."

Deforestation is the second largest contributor to [global greenhouse gas emissions](#) after fossil fuel use. It also causes the loss of diverse animal and plant life, threatens the livelihoods of indigenous groups, and increases inequality and conflict.

The researchers say that the supply chains of other food products including cattle, oil palm and cocoa supply chains are more complex than soy, making them even more difficult to monitor.

"If supply chain policies intend to contribute to the task of tackling deforestation in Brazil, it's crucial to expand zero-deforestation supply chain policies beyond soy," said Garrett, who is also Professor of Environmental Policy at ETH Zurich.

A "soy moratorium" was the first voluntary zero-deforestation commitment in the tropics—by signing it, companies agreed not to buy soybeans produced on land deforested after 2006. But while the

[commitment](#) was implemented in the Brazilian Amazon, most Brazilian soy is produced in the Cerrado—which is rich in biodiversity.

The researchers say their findings suggest private sector efforts are not enough to halt deforestation: supportive political leadership is also vital to conservation efforts.

"Supply chain governance should not be a substitute for state-led forest policies, which are critical to enable zero deforestation monitoring and enforcement, have better potential to cover different crops, land users, and regions," said Garrett.

In 2021, the COP26 Glasgow Leaders' Declaration on Forests and Land Use committed to halt and reverse [deforestation](#) by 2030. It was signed by over 100 countries, representing 85% of global forests.

More information: Gaps in Adoption and Implementation Limit the Current and Potential Effectiveness of Zero-Deforestation Supply Chain Policies for Soy, *Environmental Research Letters* (2022). [DOI: 10.1088/1748-9326/ac97f6](#)

Provided by University of Cambridge

Citation: 'Deforestation-free' supply chain pledges have barely impacted forest clearance in the Amazon (2022, October 27) retrieved 24 April 2024 from <https://phys.org/news/2022-10-deforestation-free-chain-pledges-impacted-forest.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.