

New study warns limited carbon market puts 20 percent of tropical forest at risk

August 14 2007

In an ironic twist, 11 countries that have avoided widespread destruction of their tropical forest are at risk of being left out of an emerging carbon market intended to promote rainforest conservation to combat climate change.

A study published Tuesday in the Public Library of Science Biology journal warns that the “high forest cover with low rates of deforestation” (HFLD) nations could become the most vulnerable targets for deforestation if the Kyoto Protocol and upcoming negotiations on carbon trading fail to include intact standing forest.

The study by scientists from Conservation International (CI), the South African National Biodiversity Institute, and the University of California-Santa Barbara calls for the HFLD countries to receive “preventive credits” under any carbon trading mechanism to provide incentive for them to protect their intact tropical forest. Otherwise, the same market and economic forces that cause deforestation elsewhere will quickly descend on regions that so far have avoided significant loss, the authors say.

Cutting and burning tropical forests releases the atmospheric carbon they store, contributing significantly to global climate change. The HFLD countries contain 20 percent of Earth’s remaining tropical forest, including some of the richest ecosystems.

"Given the very large – and likely still underestimated – role of tropical

deforestation in causing climate change, these forest-rich countries should be at the forefront of worldwide efforts to sequester carbon, rather than being left out entirely,” said CI President Russell A. Mittermeier, an author of the study. “With this paper, we hope to highlight this critical issue and put it on the table for future negotiations.”

Until now, the Kyoto Protocol and subsequent discussions have focused on carbon credits for new or replanted forests that replace the carbon storage services of destroyed forests. New rules being discussed by the U.N. Framework Convention on Climate Change for implementation subsequent to Kyoto are likely to create a carbon market for countries that reduce their deforestation from levels of recent years.

That would cover countries that have lost large portions of their original tropical forest, as well as those that still have more than half their forest cover but face current high rates of deforestation. In contrast, 11 HFLD countries with more than half their original forest intact and low rates of current deforestation would receive no credits for standing forests.

“The minute that you exclude those countries, their forests lose economic value in the global carbon market, leaving governments with little reason to protect them,” said study co-author Gustavo Fonseca of CI and Brazil’s Universidade Federal de Minas Gerais.

The HFLD countries are Panama, Colombia, Democratic Republic of Congo, Peru, Belize, Gabon, Guyana, Suriname, Bhutan and Zambia, along with French Guiana, which is a French territory. Three of them – Guyana, Suriname and French Guiana – comprise much of the Guayana Shield region of the northern Amazon that is the largest intact tract of tropical forest on Earth. In addition, portions of other large non-HFLD countries are in the same situation. For example, although Brazil has four other major ecosystems, the Brazilian Amazon faces a similar

circumstance as HFLD countries.

According to the study, preventive credits for HFLD countries at a conservative carbon price of U.S. \$10 per ton would be worth hundreds of millions of dollars a year, providing governments with significant economic incentive to protect tropical forests that store atmospheric carbon and supply essential natural benefits for local populations such as clean water, food, medicines and natural resources.

CI believes any carbon credit mechanism should include full representation, participation and consultation by indigenous and local communities of tropical forest regions to ensure that conservation and development programs proceed in accordance with their rights and traditional ways of life as stewards of the crucial ecosystems in which they live.

Source: Conservation International

Citation: New study warns limited carbon market puts 20 percent of tropical forest at risk (2007, August 14) retrieved 19 April 2024 from <https://phys.org/news/2007-08-limited-carbon-percent-tropical-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.