

Integrating agriculture and forestry in the landscape is key to REDD

June 9 2011

Evidence from benchmark sites across the tropics is proving that an integrated, multifunctional approach that allows for land-use sharing in agriculture, forests and other functions can achieve good results in reducing greenhouse gas emissions and raising food production levels. It provides more realistic solutions than the popular view on sparing land for forests through agricultural intensification.

Agricultural intensification, also known as the Borlaug hypothesis, means increasing yields per unit area of land regardless of the emissions caused, expecting that higher yields at constant demand will spare [forest](#) land for conservation.

"While this theory might work in certain local conditions, it may not be sufficient because globally, only 22% of increased food production is due to expansion of harvested areas," said Peter Minang, the Global Coordinator of the Alternatives to Slash and Burn (ASB) programme. "Relying on the sparing theory without active forest protection may even cause further deforestation. In an open economy, demand is not constant and farmers will clear more land to meet increased demand for [food products](#) and to make a greater profit."

A recent policy brief published by ASB-ICRAF shows that commodities meant for export contribute to land use change responsible for emissions from deforestation, forest degradation and agriculture.

Speaking at a side event during the 34th session of the Subsidiary Body

for Scientific and Technological Advice (SBSTA) in Bonn, Germany on 8 June 2011, Minang said "We will be urging negotiators and [decision makers](#) to look at a wider policy package, one that provides incentives for multifunctional land use."

The Bonn meeting will further discussions on decisions made last December at the [climate change conference](#) in Cancún, including policy approaches and positive incentives on issues relating to reducing emissions from deforestation and [forest degradation](#); and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+).

"A key challenge with REDD+ is the lack of clarity about what exactly a forest is," said Meine van Noordwijk, Chief Scientist with the World Agroforestry Centre. "In countries such as Indonesia, deforestation rates vary depending on how a forest is defined, and this creates inconsistencies that could make it difficult to determine baseline levels against which to track progress in emission reduction."

There is growing evidence that agroforestry, which is the use of trees on farms, enriches the soil to provide the necessary conditions for high quality food production and the trees act as carbon stocks, thus helping towards mitigating climate change.

"Promoting trees in the landscape within REDD+ is important because this will not only accrue environmental and livelihood benefits but will also focus attention on the drivers of deforestation that are outside the forest and account for higher carbon emissions," added van Noordwijk. "Our research in Indonesia shows that the highest risk for loss of woody vegetation and associated carbon emissions is posed by areas that are actually outside of areas defined as forests".

Sharing the use of land under forestry and agriculture will reduce

[greenhouse gas emissions](#) and increase food production much more effectively than trying to spare from use by increasing [agricultural intensification](#).

Provided by World Agroforestry Centre (ICRAF)

Citation: Integrating agriculture and forestry in the landscape is key to REDD (2011, June 9) retrieved 23 April 2024 from <https://phys.org/news/2011-06-agriculture-forestry-landscape-key-redd.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.