

Symposium: High Carbon Stocks Development Pathways

Wednesday, August 26th, 11:00-12:30, Room 13

Summary by Delicia Pino and Vanessa Meadu

Land use change and deforestation are critical drivers to climate change, contributing to 20 – 25% of gas emissions. Smallholder carbon agroforestry can be critical in reducing deforestation while restocking deforested lands. Smallholder farmers in the tropical forest margins can potentially benefit from global carbon markets and contribute to fighting climate change, by implementing agroforestry practises that store carbon, bring short term economic returns, and fit with local traditional practises. This symposium built on the key messages of a [policybrief published by the ASB Partnership for the Tropical Forest Margins](#) in 2008, and brings together case studies from Indonesia, West and Central Africa, and Brazil, as well as bringing the global perspective via the UN-REDD programme.

The first presentation, from Dr. Niken Sakuntaladewi (ICRAF Southeast Asia) focused on the challenges in Indonesia for traditional Swidden cultivation in a REDD (Reduced Emissions from Deforestation and forest Degradation) scheme. A Swidden is a piece of land cleared of woody vegetation for the temporary production of food crops. Swiddens can be mixed with other annual and or perennials for local use and sale. Despite their deep origins in Indonesia, Swiddens have come to be viewed as a threat to forests and a barrier to economic growth by the Indonesian government. World Agroforestry Centre research, however, indicates that Swidden cultivation is a dynamic system that fulfils rural family needs while being environmentally sound and open to continued improvements. Swidden systems are in transition, however, due to the growing economic importance of the tree crops that are growing in the fallow period. This has happened in the case of rubber, oil palm and mixed fruit-tree agroforests. Dr. Sakuntaladewi explained that the barriers for swidden systems to be included under a REDD scheme relate to the poor perception and understanding of the role of swiddens viz. deforestation. Well-managed swidden systems offer similar benefits to sustainable forest management, while also securing improved livelihoods. Stakeholders who are benefitting from Swidden systems must be brought into a REDD discussion process in order to help overcome negative perceptions. This research can be found in the [World Agroforestry Centre Occasional Paper "Swiddens in Transition"](#) (download)

In the second presentation, Dr. Roberto Porro from ICRAF Latin America spoke about a cocoa-based agroforestry and community-company forest management project in Anapu, Pará, Brazil. The project is integrating smallholder cocoa-based agroforestry, payments for environmental services (PES), and sustainable forest management to address emissions from deforestation and biodiversity deterioration, while also improving livelihoods. The project intends to reverse some of the negative effects caused by large-scale cattle ranching and extensive smallholder agriculture. Dr. Porro estimates that this program could potentially result in 24,000 ha avoided deforestation; since cocoa based smallholder agroforestry is a traditional cash crop in the Transamazon, it could be accepted as "forest" under Brazil's code. An ongoing challenge to implementation of this project includes land tenure security – how can you reward a farmer for not chopping down a tree doesn't even belong to him? Challenges to upscaling cocoa agroforestry include poor access to credit for financing, difficult transportation conditions and insufficient technical assistance. This proposed scheme in Anapu would make important steps in integrating policy, market and livelihood strategies, and give a concrete alternative to low-carbon storing land uses.

The emerging issues and challenges facing farmers in Brazil are also facing farmers and researchers in West and Central Africa, says Dr. Jim Gockowski from the International Institute for Tropical Agriculture, based in Accra Ghana. The belt of cocoa plantations that stretches across West and Central Africa is often cited as a continuous source of tropical deforestation. Dr. Gockowski research investigated whether cocoa agroforests of southern Cameroon can be a high carbon pathway for rural development. The research evaluated the types of non-cocoa products being grown in the agroforestry system, to understand benefits for biodiversity, poverty reduction. Revenue generated from sale of non-cocoa products, including avocado, oil palm, plum and mango was found to be most often controlled by women. The study therefore found potential improving the efficiency and extent of non-cocoa commodity

marketing, by targeting women. In terms of carbon storage, cocoa agroforests store about 40-60% of secondary forest carbon. However, the associated benefits for poverty reductions may justify this tradeoff, as secondary forests rarely generate significant economic returns for forest dwellers.

To link the landscape level research to the global context, Mr. Mario Boccucci from the UN Environment Programme described the [UN-REDD programme](#), a collaborative initiative focused on stakeholders participation, institution strengthening and capacity building. UN-REDD is developing a framework to understand the risks and opportunities, and produce spatial analyses and other tools to support countries. He described the evolution of the concept of Reducing Emissions from Deforestation and forest Degradation in developing countries, and the work being done leading up to the next Conference of Parties to the UN Framework Convention on Climate Change which will take place in Copenhagen this December. REDD would create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. In addition to reducing emissions from deforestation and degradation there are opportunities within the agricultural sector and other land uses for additional measures to mitigate climate change. REDD can create multiple benefits at the landscape level, and even contribute to climate change adaptation.