

Deutscher Tropentag, October 11-13, 2005, Hohenheim

"The Global Food & Product Chain— Dynamics, Innovations, Conflicts, Strategies"

## Will Wood Processing Enterprises Save the Rain Forests? Their Potential to Contribute to Sustainable Forest Management in the Amazon

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## Abstract

The introduction of sustainable management of natural forests is a major strategy to protect the tropical forests of the Amazon region. Wood processing enterprises are key stakeholders in the forest management process and their needs have to be considered when policy concepts for the implementation of sustained management are designed.

So far, sustainable management of natural forests has not yet achieved significant importance in the region. Studies of first pilot projects report on financial difficulties and present the economic prospects of sustainable forest management in a rather pessimistic light.

Whereas microeconomic theory assumes that private enterprises give priority to financial targets, sustainable forest management requires the combination of ecological, social and economic targets in the enterprise policy. Still, the question remains open, under which conditions wood processing enterprises in the Amazon would be able to implement sustainable forest management.

Basing on three case studies of wood processing enterprises in the Amazon region, the study presents constraints and opportunities of the implementation of sustainable forest management practices. The focus of the investigation is put on the interrelation of forest management, wood processing and timber marketing. To do so, the financial and economic impacts that result from the compliance with social and ecological standards have been studied. Data collection involved semi-structured interviews of enterprise stakeholders, as well as accounting data from the enterprises. A financial model was elaborated to develop profitability sensitivity analysis using Crystal Ball software.

The results prove that compliance with standards of sustainable forest management is NOT the most important factor for the economic success of the enterprises in question. Instead, wood processing and manufacturing processes, as well as marketing efforts determine the economic profitability.

The financial analyses of wood processing enterprises that engage in sustainable forest management show a low, but positive profitability. Apart from economic profitability, managers and stockholders of the case study enterprises, however, possess additional motives to implement sustainable forest management, such as stable round wood supply.

It is concluded that policies that are intended to promote sustainable forest management have to consider the enterprise sectors other than the forest management component as well.

Keywords: Amazon, Brazil, certification, sustainable forest management, timber industry

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