

Title: Spatial information and analysis on potential livestock related deforestation "hotspots" in the Neotropics

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Description: *Background:* Land used for extensive grazing has increased continuously over the past decades and most of this increase has been at the expense of forests. Although livestock production is not the unique cause of deforestation, it is urgent that alternatives to extensive livestock production in Latin America are found, which, while helping people to improve their living conditions, also reduce negative impacts on nature and even restore to some extent impaired environmental services. The Livestock, Environment And Development initiative (LEAD) addresses this need in its programme "Improved decision-making in addressing livestock's role in the deforestation process". Different activities have been initiated, including a GEF funded project entitled "Integrated Silvo-Pastoral Approaches to Ecosystem Management", policy work focusing on the Amazon region in collaboration with the World Bank, and the regional spatial study of livestock related deforestation "hotspots".

Objectives: *Gaining understanding on the deforestation process through spatial analysis.* Deforestation hot spots are defined as large forested areas that will be replaced by pasture in the near future. On the basis of data, literature and expert knowledge, the objective of the spatial modelling approach is to explain spatial correlation between various processes, and predict where they will take place in the near future.

Targeting future activities and helping the design of policy and technology options. The results of this regional scale study, and potential in-depth study of some of the "hotspots" will help decision makers at regional, national and sub-national level to target activities and design policies. It will also help to build awareness among these stakeholders.

Beneficiaries: The main beneficiaries of the "hotspot" maps are expected to be the policy makers and program managers in regional, national and international agencies. The targeted beneficiaries of raw data and methods for analysis are the scientific and technical communities.

Outputs:

- An updated comprehensive spatial data base at high resolution on land use and deforestation indicators for the Latin American Neotropics
- A predicted near future map of livestock related deforestation hotspots
- A workshop to imply regional institutions, exchange data and information and validate results
- A scientific publication on the issue and outcomes of the analysis