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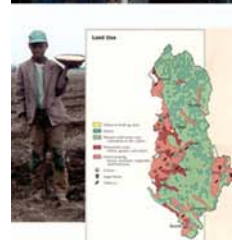
Land Tenure Center

APPLIED RESEARCH SUMMARY: THE INFLUENCE OF LAND TENURE ON FOREST COVER CHANGE IN ECUADOR AND IMPLICATIONS FOR REDD INVESTMENTS

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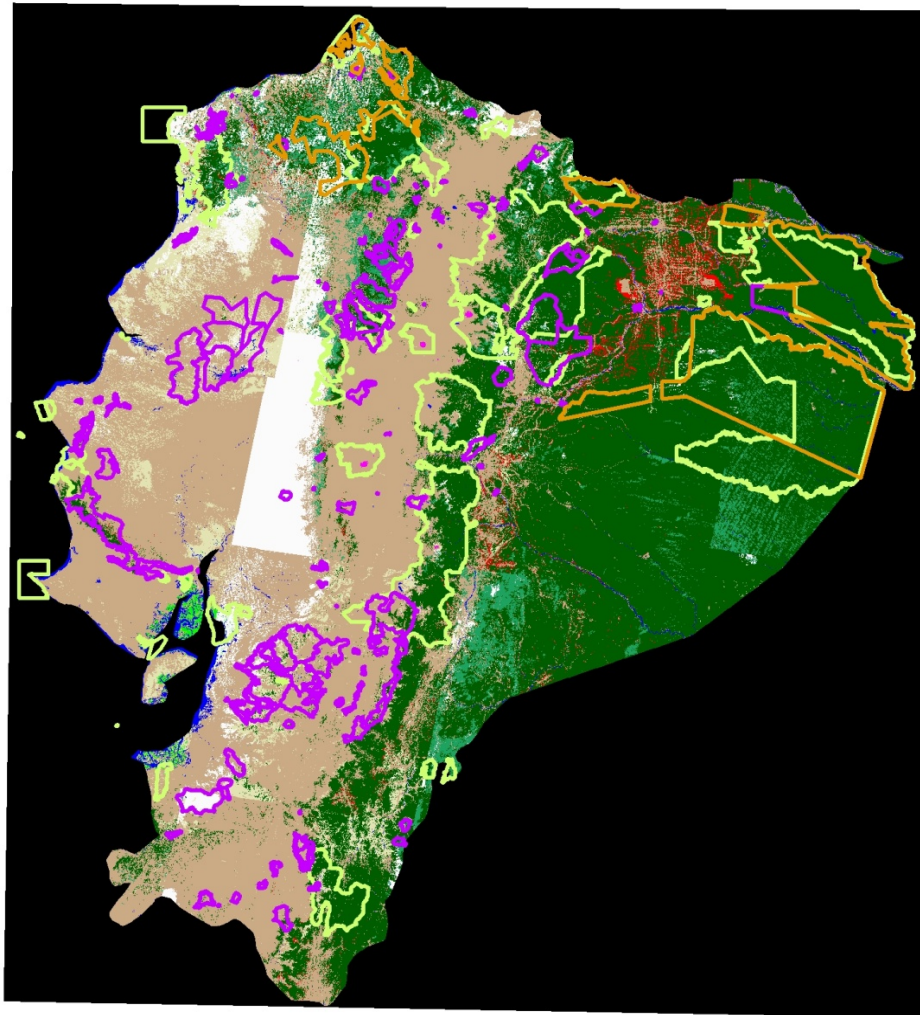
Applied Research Summary: The influence of land tenure on forest cover change in Ecuador and implications for REDD investments

Tropical forest economists and other experts broadly agree that land tenure represents a major obstacle to pro-poor PES. Yet the impact of land tenure interventions on forest conservation is poorly documented. More often researchers test the impact of poverty, resource and agriculture pricing, infrastructure, and protected area status on forest cover. Frequently they signal that land tenure is a key factor shaping the interaction of socioeconomic variables and forest conditions, but few explicitly test land tenure as a predictive variable. This gap is partly due to the considerable challenge of locating and acquiring data on land tenure, particularly in forested regions. Accessing such data and interpreting it correctly requires careful, often painstaking, review of archives and collaboration with local legal experts. Land tenure is also inextricably linked to other social variables, thus ascribing causality is challenging.

In partnership with Ecolex (an environmental law NGO long engaged in titling and land reform initiatives) and Conservation International- Ecuador (the Ecuadorian NGO most closely engaged in policy formation for Sociobosque) LTC is advancing land tenure/forests research at two scales:

- A study of the relationship between land tenure conditions and land cover in 4-5 forested cantons of Ecuador. Specifically testing how the size, tenure type, and legal status of landholdings predict land use, particularly forest cover.
- An examination of interactions with other socioeconomic factors (distance to roads, population centers, poverty level, etc) to understand the relationship.

This second analysis and publication will focus on forest cover change in Ecuador's primarily forested protected areas, as compared with change in forested areas under other forms of management: patrimony forests, protected forests (public and private), and indigenous territories. (See Figure 1, next page.) The study will focus on forest cover change outcomes for the time period of 1990s-2000s. This analysis is patterned after that done by Nepstad et al (2006) in Brazil. Our forest change variable is based primarily on data derived from Steininger and Harper's deforestation analysis for Ecuador. Deforestation risk and fire density indices will also complement this measure and are guided by Steininger and colleagues.



Legend




-  Patrimony Forests (public & private)
-  Protected Forests
-  Ntl System of Protected Areas

Figure 1. Forest cover change in Ecuador, 1990-2000, overlaid with protected areas, protected forests, and patrimony forests. (Sources: Steiner and Harper, Conservation International; SNAP-Ecuador).