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“Development on the margin”

Effects of REDD Policy on Potential CO₂ Emission Reduction and Poverty Alleviation

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Abstract

Reducing emissions from deforestation and forest degradation (REDD) is considered to be a low cost carbon mitigation measure in comparison to other actions. Nevertheless, it has also been questioned to which extent REDD will be sufficiently attractive to change the current land use decisions. Land use decisions are largely based on opportunity, transaction and implementation costs. Another concern is related to REDD effects on poverty because forest conservation in countries where the level of poverty is high may have adverse equity implications.

We determined opportunity, implementation and transaction costs for landholders and conservation agencies through surveys, focus groups, expert interviews and the study of literature in two case studies in Nicaragua and Costa Rica. Combined with estimates of poverty levels and tenure categories we aimed to determine the land use and poverty impacts of REDD for its implementation through Payment for Ecosystem Services programs (PES).

Preliminary results suggest that under various carbon price scenarios agricultural land use continues to be the more profitable land use option in large parts of the study area. Results also point to the benefits of scale in that larger forest conservation projects reduce per land unit transaction costs of both national and voluntary carbon market frameworks. Regarding impact on poverty, it seems that upfront investment costs (transaction and implementation costs) reduce the ability of poorer landholders to enrol in respective programs so that higher income groups are likely to benefit more directly from national or international REDD markets. For the case of Nicaragua, it seems that indigenous communities have better chances to participate in REDD PES schemes due to clearly defined property rights. Data also shows that this group is better off in terms of income. The results help formulate suggestions for the design of national REDD programs, for example to reduce enrolment costs and thus support participation of lower income groups.

Keywords: Central America, opportunity cost, payment for ecosystem services, poverty, reducing emission from deforestation and forest degradation, transaction and implementation costs