Institutional Design as a Driver of Transaction Costs in Forestry Carbon Schemes in Developing Countries

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Abstract

Reducing carbon emissions in the forestry sector based on a functioning carbon market is often seen as a cost-effective measure to tackle climate change impacts. However, transaction costs incurred by transactors are typically unknown, not quantified and therefore usually neglected in their institutional design. In this study, we distinguish between three types of transaction costs: search, design and negotiation costs and measure these based on combination of desk study and a global survey for CDM and non-CDM related forestry carbon schemes implemented in Latin-America, Africa, and Asia, with cost reported both in monetary terms and in terms of people and time. Most importantly, we focus on identifying key factors that drive the magnitude of these transaction costs, i.e. the characteristics of the transaction, the transactors and institutional design. We find significant differences between CDM (mandatory, regulated) and non-CDM (voluntary, non-regulated) projects. Besides the characteristics of the carbon market, our results show furthermore that transaction costs depend on institutional design features such as the origin of the project funding, whether the project is self-financed, the sale of carbon credits, and whether project developers and project participants know each other and have collaborated with

each other in the past. In addition, factors relating to the transaction and other project characteristics also play a role in explaining transaction costs, such as the project's duration, payment mode and frequency, and its location. These results provide important indications and recommendations for minimizing transaction costs in designing carbon markets.

Key words: Transaction costs, Forestry carbon, REDD, CDM, Carbon market, Climate change, Institutional design.