Social Network Analysis as Tool to Support the Design and Implementation Process of Payment for Ecosystem Services: The Example of Net-Map

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Abstract

Payment for ecosystem services (PES) can be an approach to combine pro-poor and environmental instruments for natural resource management. Therefore they serve not only for the protection of tropical forests and wetlands, but also for the improvement of social conditions and rural development. However, the design and implementation of PES implies several challenges. Factors like formal institutional components are important, but also the capability to establish a social context conducive to the payment scheme, considering local behaviours and attitudes towards conservation. In consequence, one of the most important factors to be considered when pursuing a successful process is the role played by local stakeholders and their level of commitment.

In this paper we investigate how to foster a PES development process and the motivation of the participants supported by social learning. We show how the Net-Map tool, an interview-based mapping tool that helps people understand, visualise, discuss, and improve situations in which many different actors influence outcomes, can serve not only as a tool to assess the stakeholders’ relations and their part in the implementation of the PES but also as an instrument for social learning. The tool can be used in three different stages of implementation: fully implemented PES scheme, planned but not yet implemented PES scheme, development of a PES scheme. Based on Net-Map interviews and the analysis of three workshops that took place in Costa Rica on March 2014, we discuss the results for three different case studies: Golf Dulce, Tierraba Sierpe and Coyolito and conclude about the importance of the tools which lies in the construction of a common sense of the PES-structure, the creation of ownership and the consolidation of transparency and trust amongst the participants as well as the reflection about the existing social capital to be necessary for the implementation.

Keywords: Environmental planning, Net-Map tool, participatory research, payments for ecosystem services, social network analysis, transdisciplinary research

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