

Social values

Biologist Petteri Vihervaara gathered together specialists in geography, ecology, forestry, cultural studies and ethnography to analyse people's attitudes about the ecosystem services of different plantations in the context of rapid afforestation in Uruguay.

■ What was the impetus for this project? What was the main objective of the work at the beginning of the project?

Our main goal was to analyse how afforestation in Uruguay affects people's perceptions of changes in ecosystem services. We found that local people were not aware of carbon sequestration (perhaps the concept is too abstract); therefore they couldn't recognize its social value. However, Uruguay would benefit from local awareness of carbon sequestration if the country decided to explore the mitigation potential of plantations. As shown in other contexts — such as the Forest Biodiversity Programme for Southern Finland — social knowledge of ecosystem services, through political will, can create incentives for market mechanisms. Informing local private forest owners about the benefits of biodiversity in Southern Finland increased understanding and facilitated several initiatives, including a payment for the

ecosystem services scheme. A similar thing could happen in Uruguay, with carbon sequestration creating incentives for local carbon markets. Once in place, carbon markets would rely on 800,000 hectares of plantations and could also stimulate additional tree planting.

■ How did you go about finding suitable collaborators?

Some of us had worked together before and continued cooperation in this case study on plantations. In addition, thanks to the support of plantation managers and other staff working at Stora Enso Uruguay, a company leader in wood products, we were able to find key local contacts to carry out the fieldwork.

■ Did you encounter any difficulties in working with a team of experts with different research backgrounds?

Building a coherent approach across the different disciplines was challenging. We used systems-thinking tools to help achieve a set of common goals. It certainly took a long time, and required extra communication as we needed to develop a common language around the different meanings natural and social scientists attribute to ecosystem services. Another big challenge was to harmonize concepts among practitioners, such as foresters and scholars.

■ What was the highlight of working with an interdisciplinary team?

It was wonderful learning about how social scientists and foresters look at ecosystem services, and understanding new terms as a result of the collaboration. In particular, I found it rewarding to learn about the many different values of ecosystem services for the end user.

■ Any surprises?

In developing the study, it was really surprising to find out how experts and laypeople can have such different perceptions of ecosystem services. We also found it surprising how much the cultural and historical background in Uruguay — in particular the land-owning tradition

characterized by the concentration of land in the hands of few landowners — affects the social–ecological system.

■ Did you learn any lessons about interdisciplinary collaboration from this project that would benefit others trying to do similar work?

Taking time for communication initially is fundamental. Finding local partners makes it easy to establish key contacts quickly. Finally, taking a holistic approach allows for identification of the broad social, environmental and policy implications of the research.

■ Was it difficult to get financial support, and what would you suggest to researchers looking for funding to carry out interdisciplinary work?

Our project was initially funded by the Academy of Finland. Once we secured support from the academy, we were able to attract additional funds from private institutions such as the Finnish Cultural Foundation. Getting financial support for interdisciplinary work is difficult though. Research-funding evaluators are often specialists in only one discipline and lack the skills to assess interdisciplinary proposals. Furthermore, funding applications have gaps in some disciplines as researchers can't gather all the experts from the outset.

■ Any final thoughts?

The debate about ecosystem services, especially those with global impacts such as carbon sequestration, but also biodiversity functions and nutrient cycling, should focus on social implications rather than on monetary valuation. We need to understand the social and cultural context before establishing any payment for ecosystem services schemes such as carbon markets. Such an understanding is a pre-condition for success.

INTERVIEW BY MONICA CONTESTABILE

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