Keywords	Costa Rica, Reforestaton, Conservation, Policy instruments, Institutional fit, Payments for Environmental Services(PES), Social Resiliance, Ostrom

Main research question

Is there a relationship between the evolutionary process of policy instruments related to environmental management in Costa Rica, and its impact on socio-ecological resilience?

Research finding in brief

Hojancha went through a gradual process of resilience loss due to socioeconomic and ecological changes occurred in the last 60 years. The most significant cause of stress in social-ecological systems was the continuing changes in livestock systems. They triggered high economic vulnerability causing large waves of emigration and changes in the landscape, threatening the stability of services provided by ecosystems.

Results show that in Nicoya, Nandayure and particularly in Hojancha, public participation played an important role in their resilience to crisis situations. As recognized, public participation in decision-making allows integrating cultural diversity and the rights and duties distinct social sectors in environmental management. It also increases the environmental awareness of the population, generating legitimacy and transparency in environmental decision, as has been the case of Hohancha, even before its declaration as a canton. This canton is known for establishing integrated networks around the environment which has encouraged the private sector to get involved in solving environmental problems.

Policymix approach

This paper highlights the relationship between the evolutionary process of policy instruments related to environmental management in Costa Rica, and its impact on socio-ecological resilience of the Hojancha Peninsula. It identifies various causal factors and combinations that have contributed development of the areas.

As central theoretical basis, we used the "Framework for analyzing social-ecological systems" proposed by Elinor Ostrom et al. (2009). This method identifies first level variables of analyzing such as: social, economic and political scenarios; system of resources, governance, resource units, users, interactions, and related ecosystems. It also incorporates more specific (or second level) variables; which allows to narrow the range of possible indicators within social-ecological systems.

Reference:
Chacón-Cascante et al. 2013. Evaluating the policymix path dependency of PES using socio-ecological system characteristics: the case of Hojancha, Nicoya and Nandayure

Website:
Forthcoming at http://policymix.nina.no/

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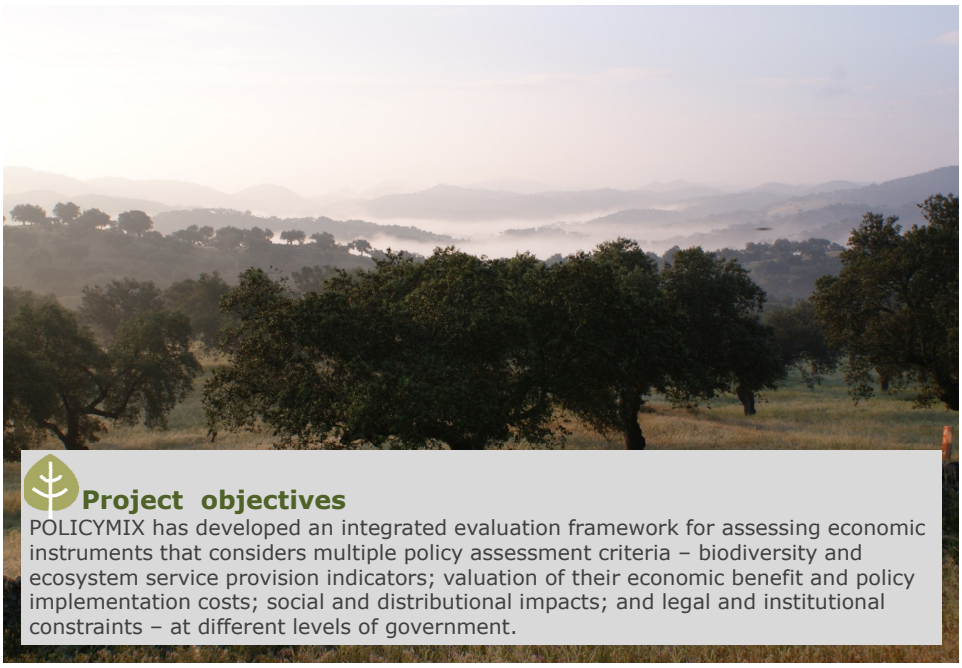
ASSESSING THE ROLE OF ECONOMIC INSTRUMENTS IN POLICYMIXES FOR BIODIVERSITY CONSERVATION AND ECOSYSTEM SERVICES PROVISION



Project objectives

POLICYMIX has developed an integrated evaluation framework for assessing economic instruments that considers multiple policy assessment criteria – biodiversity and ecosystem service provision indicators; valuation of their economic benefit and policy implementation costs; social and distributional impacts; and legal and institutional constraints – at different levels of government.

Methodology

POLICYMIX focuses on the role of economic instruments for biodiversity conservation and ecosystem services provided by forest ecosystems. The cost-effectiveness and benefits of a range of economic versus regulatory instruments are being evaluated in selected POLICYMIX case studies in Norway, Finland, Germany, Portugal, Brazil and Costa Rica. Comparative analysis evaluates the possibilities for transfer of policy success stories between Europe and Latin America, and promoting learning from policy failures.

Training and dissemination

POLICYMIX actively used advisory boards including land users, local managers and national policy-makers, who collaborated with our researchers in the feasibility assessments of economic instruments. A web-based POLICYMIX TOOL encompassing policy impact assessment guidelines, case stories and demonstrations of policy assessment methods is aimed at supporting dissemination and learning.

Results

POLICYMIX research discusses improvements in the design, targeting and implementation of economic instruments for biodiversity conservation through better understanding of (i) the linkages and complementarities between impact assessment tools, (ii) complementarities between different policy instruments in a policy mix, and (iii) trade-offs in design of a policy mix between economic, environmental and social impact criteria.

EC Contribution:
3 458 312 €

Duration:
2010-2014

Consortium:
9 partners from 8 countries

Project Coordinator:
Norwegian Institute for Nature Research (NINA) (Norway)

Project Web Site:
http://policymix.nina.no

Key Words:
Biodiversity, ecosystem services, policy mix, social ecological systems, economic instruments, payments for environmental services, ecological fiscal transfers

Partners:

- Norwegian Institute for Nature Research (NINA), Norway
- Helmholtz Centre for Environmental Research (UFZ), Germany
- Foundation of the Faculty of Sciences and Technology, New University of Lisbon (FFCT-UNL CENSE), Portugal
- Institute for Environmental Studies, Vrije Universiteit Amsterdam (IVM), Netherlands
- International Institute for Environment and Development (IIED), UK
- Finnish Environment Institute (SYKE), Finland
- Rede de Desenvolvimento, Ensino e Sociedade (REDES), Brazil
- Fundação de Apoio a Pesquisa Agricola (FUNDAG), Brazil
- Tropical Agricultural Research and Higher Education Center (CATIE), Costa Rica

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