



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 Agrícola (FUNDAG), Brazil
- Tropical Agricultural Research and Higher Education Center (CATIE), Costa Rica

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Keywords

Brazil, São Paulo, FUNDAG, WP4, challenges, contexts and gaps, implementation process, opportunity costs, ecosystem service values, PES (public, private)

Main research question

PES schemes have been identified as desirable instruments to achieve ecosystem services preservation. Forest loss is the main threat to the sustainability of water-related services in the Cantareira-Mantiqueira Corridor Region. What are the different opportunity costs incurred by farmers from the São Paulo section of the Cantareira-Mantiqueira corridor?

Research finding in brief

Using the factorial analysis by main components, the structure of relations of 20 variables, constructed from the LUPA data of 2007, was summarized in 8 composite indicators (common factors), which explained 72% of the variability of the original variables. Great heterogeneity cost opportunities among farmers. This will cause difficulties in implementing the best way to compensate farmers

Policy mix approach

The social aspects that reflect the heterogeneity of the economic contexts of the populations that reside in a given area are scarcely considered. It is true that the effectiveness of environmental policies is highly dependent on correct diagnoses regarding the socioeconomic and ecological reality of a given region. The appropriate balance between ecological and economic criteria is essential for the elaboration of a policy mix able to ensure the preservation of biodiversity and the continual flow of ecosystem services. This study assumes that the PES is a complementary tool and should be implemented in an institutional framework capable of operating together different policy instruments.



Reference:

Fasiaben, M.C.R., Gori, A., Andrade, D.C., Ângelo, J.A. Costs of environmental protection in different types of agricultural production units: the case of Cantareira-Mantiqueira Corridor Region.

Website:

Forthcoming at <http://policymix.nina.no/>

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