

Keywords

Norway, Brazil, São Paulo, Costa Rica, Portugal, WP3, NINA, FUNDAG, CENSE-UNFL, CATIE, WP 3, Impact evaluation (Step 3 a), Impact evaluation (Step 3b), Biodiversity & ecosystem impact, Final outcomes, Local administrative area, PA Enforcement, AEM, PES, Tradable Rights & Offsets

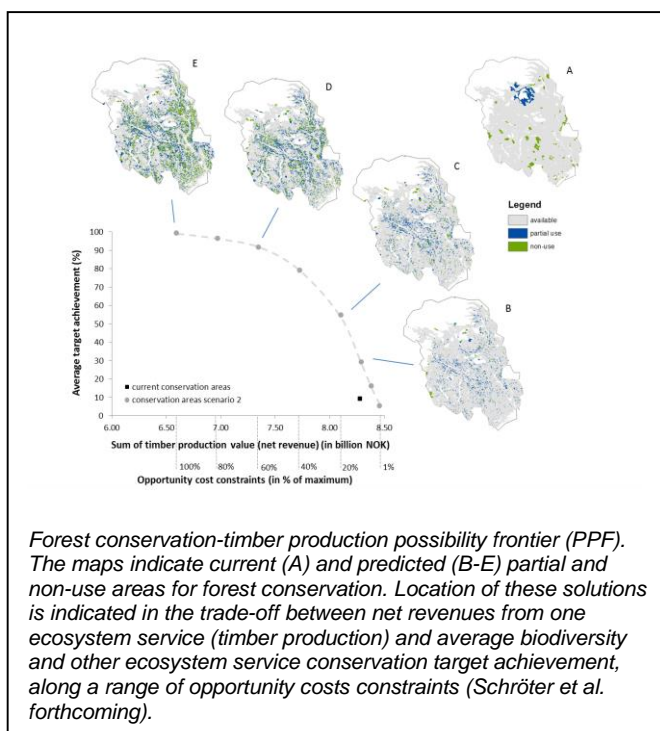
Main research question

Typical characteristics of the conservation problem are multiple goals and a spatial structure of conservation features, ecosystem services and of the costs to protect them.

Polycymix approach

POLICYMIX uses Conservation Planning Tools (CPTs) to assess cost-effectiveness of policy instruments. CPTs have been designed to solve a resource allocation problem aiming to optimize conservation target achievements while taking into account costs in a spatially explicit context and grounded in conservation criteria supported by ecological knowledge. Particularly suitable to the conservation problem is that CPTs can support the analysis of a polycymix by evaluating conservation gains attributed to the various instruments through a common 'currency of effect', the instrument's contribution to the achievement of the

conservation targets. Although used in many conservation planning problems, CPTs have not been explicitly used as a methodology to assess cost-effectiveness of policy impacts. Both *ex-post* analysis and prospective, *ex-ante*, analysis for instrument design or improvement can be conducted with CPT methods. In particular, the use of Marxan with Zones enables the joint analysis of several policy instruments, the policy mix. There are some caveats with the use of CPTs, some of them can, at the same time, provide insights about the conservation problem, including implicit assumptions, uncertainty and knowledge gaps. For instance, the analysis is based on a selection of indicators of biodiversity conservation and ecosystem service value that need to have a spatial representation and area coverage. Also, there must be an agreement among actors about how much of these biodiversity features and ecosystem services should be protected or maintained, and about the degree to which individual instruments – e.g. areas with full protection, or partial use areas of different kind will contribute to biodiversity persistence.



Reference:

Rusch, G. M., D. N. Barton, P. Bernasconi, Z. Ramos-Bendaña and R. Pinto 2013. [Best practice guidelines for assessing effectiveness of instruments on biodiversity conservation and ecosystem services provision. POLICYMIX - Technical Brief 7. 14 pp.](#)

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

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