

### Keywords

General , WP4, impact evaluation, scenario analysis, ecosystem service values, resources, final outcomes, protected areas, PES, AEM, tradable rights & offsets.

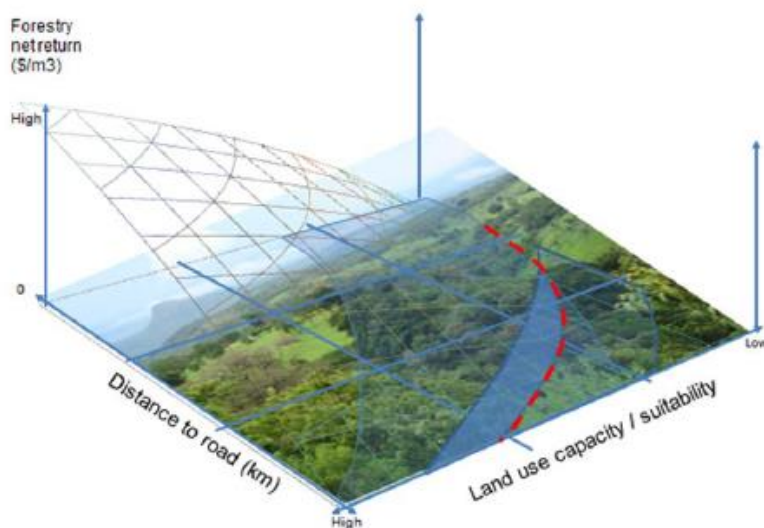
### Main research question

Different conservation policy instruments impose different land use restrictions and hence entail different opportunity costs. What approaches can be used to calculate opportunity costs to be used in reserve site selection models?

### Research finding in brief

Four examples of opportunity cost mapping from POLICYMIX case studies – Portugal, Costa Rica, São Paulo and Norway – are discussed. Maps of

opportunity costs must be calculated ‘fit-for-purpose’, specifically for the type of conservation policy instrument in question. Opportunity costs vary with land use capacity and accessibility. We caution that GIS-based mapping does not easily represent land user characteristics and preferences which also determine ‘perceived opportunity costs’. Opportunity cost maps incorporate large variation and provide at best rough approximations of opportunity costs at any particular location.



### Policymix approach

Why is this a policymix analysis? Opportunity cost maps – although rough approximations - may nevertheless be useful for priority-setting using reserve site selection models and for illustrating the ‘production possibility frontier’ of mixes of conservation instruments in tools such as Marxan with Zones.

#### Reference:

[Barton, D. N. et al. \(2012\) Assessment of existing and proposed policy instruments for biodiversity conservation in Norway. Report 1/2012](#)

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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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