Accounting for capacity and flow of ecosystem services for Telemark, Norway Published paper



Keywords	service

Norway, NINA, WP9, Challenges, context and gaps, Ecosystem service values, Modelling, Ecosystem service needs, spatial ecosystem service accounting

Main research question

How can we spatially quantify both capacity and flow of multiple ecosystem services for a hemiboreal region?

Research finding in brief

We conceptually distinguish capacity to provide ecosystem services from the actual flow of services, and empirically assess both by means of different spatial models, developed with various available datasets and methods. Capacity and flow differ both in spatial extent and in quantities. A balance between capacity and flow can be used as a parsimonious estimation of over- or underuse of the respective service.

Policymix approach

A spatial accounting approach for multiple ecosystem services is the basis for development of policy instruments. Ecosystem accounting can deliver information about over- or underuse of ecosystems



Reference:

Schröter, M., Barton, D.N., Remme, R.P., Hein, L., 2014. Accounting for capacity and flow of ecosystem services: A conceptual model and a case study for Telemark, Norway. Ecological Indicators 36, 539-551. Website: http://dx.doi.org/10.1016/j.ecolind.2013. 09.018

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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 <u>POLICYMIX TOOL</u> encompassing policy impact assessment guidelines, case stories and demonstrations of policy assessment methods is aimed at supporting dissemination and learning.





REDES

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) tradeoffs in design of a policy mix between economic, environmental and social impact criteria.

FundAg



Duration: 2010-2014

Consortium:

9 partners from 8 countries

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

Project Web Site: http://policymix.pir

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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