

DELIVERABLE 6.2

Policy brief on factors of success for the implementation of selected innovative governance approaches and instruments

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Policy brief No. 1:

Increasing the effectiveness of ecosystem services provision from reduced eutrophication and flood risk management – Success factors of innovative instruments in agricultural and environmental policies

The BONUS funded project MIRACLE highlights the critical role of adequate institutional arrangements for the successful implementation of innovative policy instruments to promote multiple ecosystem service benefits. Building trust through long-term cooperation of multiple stakeholders in decision-making processes and an active role of the civil society and private sector in designing and financing payments for ecosystem services increases the scope for innovations in agricultural and environmental policies. Long-term contracts and result-based payment design further increase their effectiveness.

Context

Over the last several decades, market forces and land use and management policies, including agricultural policy, have led agricultural practice and landscapes to be increasingly specialised in producing food and other provisioning services, such as fibre and fuel. This is often at the expense of other ecosystem services such as clean water (via nutrient and pesticide runoff), pollination services (loss of habitats and biodiversity) and soil carbon storage (soil fertility depletion and erosion).

Greater mainstreaming of the ecosystem services approach in agricultural and environmental policies could support better policy integration, potentially refocussing agricultural policy objectives on win-win and trade-off considerations between agricultural and environmental interests. Scientific discussions of innovative policy instruments such as outcome-based payments for ecosystem services suggest potentials in addressing and involving new key stakeholders and creating new incentives for land managers to produce multiple ecosystem benefits from reduced eutrophication and flood prevention. Lessons learnt from experiences with existing examples of innovative policy instruments in the EU and further afield improve the understanding of barriers and opportunities for the implementation of such policy innovations in different institutional settings across the BSR and inform the assessment of the required changes in existing governance structures.

The lessons learnt summarised in this policy brief are based on the conceptual framework for analysis of the suitability of the ecosystem services approach to promote innovations in agri-environmental policy developed in the MIRACLE report D6.1. In particular, it is based on a review of more than 30 examples of payment for ecosystem services-type schemes from the EU, Australia and North America. The review paid particular attention to examples targeted at water quality and watershed management, biodiversity, carbon sequestration and bundles of ecosystem services.

Trust-building and close collaboration between different stakeholders are key preconditions for successful policy innovations to promote multiple ecosystem service benefits

The MIRACLE project, funded by the BONUS Programme, concludes that long-term cooperation of multiple stakeholders in decision-making processes and active civil society and private sector engagement are key factors of success for an integrated approach for ecosystem service management in agricultural and environmental policies. A common success factor highlighted across many of the reviewed examples (e.g. 'Upstream Thinking with Westcountry Rivers Trust in the UK', pilot projects on cooperative management for water and habitat protection in the Netherlands, 'Florida Ranchlands Environmental Services Project' and 'Performance-based Environmental Policies for Agriculture Initiative' in the USA) is the importance of close and trusting cooperation between stakeholders from the start of the development phase of the scheme.

This includes a joint assessment of the extent of the problem(s) the policy instruments shall address as well as the development of strategic objectives and the payment design. It does not only apply to cooperation between land managers and conservationists but also to cooperation at the administrative

level. Designing, implementing and coordinating support schemes benefits from joint efforts of governmental agencies and private stakeholder organisations. Experiences from the ‘Kooperationsmodell Trinkwasserschutz’ in Germany and the ‘Medford Water Quality Trading Programme’ in the USA highlight the advantages of a shared administration between ministries and private stakeholder organisations, benefiting from a wider pool of know-how, shared responsibilities and joint ownership.

Intermediaries play a critical role in the trust-building process. They act as a broker with the ability to integrate actors from different sectors across scales to build coalitions with common objectives. Additionally, their capacity to mobilize private funding allows them to help initiate support schemes. In many examples (e.g. ‘Bonneville Environmental Foundation’s Water Restoration Certificates’ in the USA, ‘Flowering Steinburg’ in Germany), the role of an intermediary is carried out by a civil society organisation.

However, changes in institutional arrangements to facilitate close cooperation between different stakeholder groups and the recognition and appreciation of a wider set of objectives and interests require the facilitation of (social) learning processes. Figure 1 provides an overview of the factors of success discussed in this policy brief.

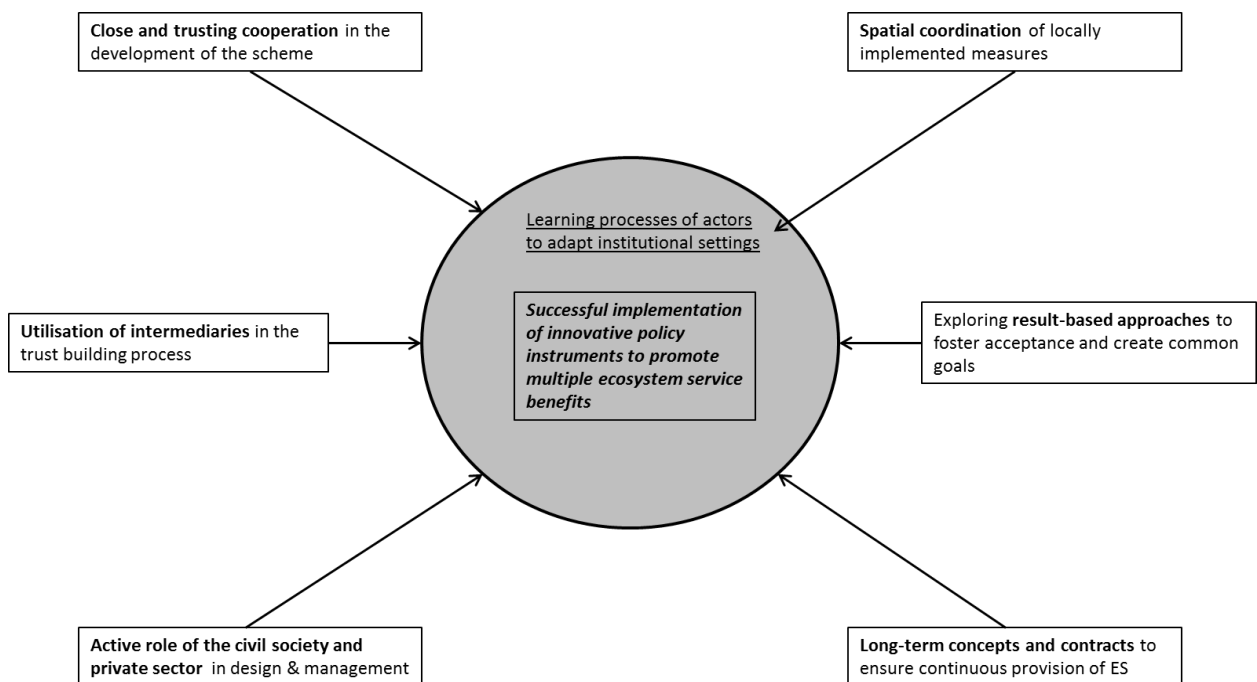


Figure 1 Factors of success for innovative policy instruments

Spatial targeting, result-based design and long-term contracts improve the effectiveness of support instruments

Achieving the desired provision of ecosystem services from eutrophication and flood management requires spatial coordination of locally implemented measures and a collaborative approach to land and water management. Spatial coordination can be incentivised by bonus payments for a particular network or catchment pattern (e.g. ‘Ordinance for Ecological Quality’ in Switzerland) or neighboring parcels in hotspots (‘Conservation Reserve Enhancement Program’ in Oregon). However, spatial coordination on its own is not sufficient for complex ecosystem services. Interests of a multiplicity of actors need to be aligned, which requires more effort and funds to achieve a fair process of involvement and the desired outcomes. Partnership or community-based approaches such as ‘Landcare projects’ in Germany and Australia merit further exploration to address those issues.

Schemes particularly targeted towards local conditions also, in most cases, pursue a result-based approach. Schemes with a result-based approach permit the land manager to innovate, thus, drawing on their experience and local knowledge to achieve better and more cost-effective results. Examples such as the 'Flowering Meadows Scheme' in France show that by making knowledge of how to improve conservation on farms important, result-based schemes create common goals between farmers and conservationists, leading to cooperation between two conflicting groups.

Long-term concepts and contracts such as in the 'MoorFutures' in Germany or the 'Clean Water Services Thermal Loading Offset Programme' in the USA, jointly developed between the different stakeholders, further improves the trust and support of actors for ecosystem service benefits and helps to ensure permanence and continuous provision of ecosystem services. The issue of long-term concepts and contracts is linked to the concern that a seller of ecosystem services might exit a scheme with short term contracts on short notice when a financially more attractive alternative (e.g. increased market prices as an incentive to increase production) to the scheme is offered.

Lessons learnt

To contribute to further improvements in the effectiveness of agricultural and environmental policies in ensuring multiple ecosystem service benefits, a number of lessons can be derived from the review of existing payment for ecosystem services-type schemes in the MIRACLE project:

- Building trust through long-term cooperation of multiple stakeholders in decision-making processes and an active role of civil society and the private sector facilitates the adaptation of policy innovations in ecosystem service management.
- Layered payments for ecosystem services with multiple buyers can generate multiple ecosystem service benefits from the same parcel of land or water body. Stronger engagement of the private sector enables payment designs and institutional settings outside formal policy boundaries.
- Result-based payments and long-term contracts can improve the continuity of ecosystem services provision from land and water management and foster positive impacts on the motivations and attitudes of sellers.

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What is BONUS MIRACLE?

BONUS MIRACLE approaches ecosystem services by policy instruments that acknowledge interlinkages between eutrophication, flood management, biodiversity, coastal water quality and human health. The objective is to identify, measure and recommend cost-efficient solutions in the Baltic Sea Region, through modelling, visualisation, stakeholder dialogues and social learning. MIRACLE also identifies how institutional settings have shaped governance structures and policy instrument choices and provide roadmaps on opportunities for improved integration of agricultural, environmental and risk management policies adapted to a changing climate. By creating a forum for dialogue between researchers and stakeholders in case study areas in Latvia, Poland, Sweden and Germany, consensus building and priority settings are used to develop roadmaps and new models of governance from trade-offs between different objectives. Cost-effectiveness and cost-benefit analyses of priority measures are linked to interactive modelling of sources and the magnitude of eutrophication and floods in a changing climate. Impact scenarios of measures suggested by stakeholders to reduce floods and eutrophication are modelled, and the impact on e.g. biodiversity, human health and biosecurity assessed. Finally, recommendations for innovative governance structures and instruments are formulated, including payment for ecosystem services, in order to improve incentives for provision of sustainable ecosystem services.

See the project website (www.bonus-miracle.eu) for additional information.



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