

New dance, old steps? Co-creation for the Ecosystem Approach to Management

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Summary

Combined advance of knowledge and action has become critical to bridge the gap between environmental problems and our capability to solve them. Disciplinary boundaries have fused to understand social-ecological systems and connect research, innovation, policy and management. Building on participatory research, co-production of knowledge and knowledge structuring, we propose a new approach –co-creation- to lead both science and policy-making in Ecosystem Approach to Management (EAM). Co-creation is a theory of interactions that combines analytical and participatory tools to generate knowledge that has scientific acceptability, policy relevance and social robustness. This paper sheds light on the use of co-creation to advance in the EAM presenting three main arguments: i) current processes for the generation and management of knowledge are not suitable for the EAM; ii) the co-creation approach can be used to improve both science and policy making performance; iii) preliminary results from the on-going implementation in seven European sea-basins evidence cognitive, scale and institutional challenges to integrate the co-creation approach into the real policy context.

Introduction

Stakeholder participation in environmental sciences and management has been gaining momentum in the policy agenda. Participatory research, stakeholder engagement (Mackinson et al., 2011), co-production of knowledge (Pohl, 2008, Berkes, 2012), engaged scholarship (Van de Ven, 2007) or even co-creation (Pralhad and Ramaswamy, 2004; Reeger and Bunder, 2009) have all been directed towards improving the governance of European environmental, sectorial and development policies. According to Van Vliet et al. (2010) the main reasons for undertaking participation include democratic principles, stakeholders buy-in, the integration of local knowledge and social learning which allows for the generation of useful insights.

Currently, the co-creation approach is under a proof of concept study within the MareFrame¹ project -Co-creating Ecosystem-based Fisheries Management Solutions- focused on removing the barriers preventing more widespread use of the ecosystem-based approach to fisheries management. It was clear from the outset that this demands substantive advances in the research-stakeholders approaches, covering from consultation to deference, experience-based or community science models (see Jacobsen et al. 2011 and Reed, 2008).

Material and methods

The literature widely recognizes that participation is a hallmark for the EAM (Murawski, 2007), based on the lessons learned in the last 30 years of marine governance and the puzzles of

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moving from a uses perspective to a system perspective (Ounanian et al. 2012). A triangulation of qualitative methods has been applied, combining literature review, 7 case studies, and process tracing within the MareFrame project.

Results

Insofar knowledge production (sensu Gibbs et al., 1994) has showed limits to deal with EAM, preliminary results claim for correlation between new and already existing practices (Reeger and Bunder, 2009), management of disillusionment and stakeholders fatigue (Reed, 2008; MareFrame, 2013), as well as reluctant of scientists to explore models where knowledge is construed and tested beyond the limits of the scientific community. The implementation of the co-creation approach within the project has proven challenging in terms of cognitive processes, scales and embedded institutional settings at European Union level.

Discussion

The co-creation approach aims for knowledge development to: i) generate ways of framing the issues, reframe questions and problems; ii) identify and understand the underlying needs; iii) create new solutions to social challenges; and iv) avoid panaceas by directly acknowledge science-boundary inflation (Wilson, 2009) participation drawbacks (Reed, 2008) and adaptiveness limits (Jentoft and Chuenpagdee, 2009). Although theoretically more suitable for the EAM, the aforementioned challenges will support concepts and processes' review to ensure its feasible implementation into real policy contexts.

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