Network Governance from the top – The case of ecosystem-based coastal and marine management

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ABSTRACT

Contemporary environmental policy incorporates a collaborative approach, and conservation management commonly denotes the formation of governance networks on the sub-national level. This trend toward networks implies a shift in the mode of public governance since state-centered top-down control is replaced by a primary focus on governing networks from the top. Previous research has studied the performance of collaborative networks while the role of the state in these settings has been acknowledged to a lesser extent. Thus, prevailing knowledge concerning how public agencies can govern networks towards the fulfillment of environmental objectives is restricted. This issue is addressed in this paper through an empirical case study of a state-initiated process aimed at implementing the ideas of ecosystem-based management, by means of collaboration networks, in five coastal regions in Sweden. What governance strategies were adopted by the environmental protection agency, and how can the governance outcome be described in terms of ecosystem-based management and stakeholder support? Based on the empirical findings, the influence of the chosen governance approach on the outcomes is discussed. The results clearly illustrate the particular tradeoffs that occur as various governance strategies interact and how these influence both social and ecological aspects. The application of extensive and rigorous governance strategies enhance the fulfillment of ecosystembased management while vagueness and flexibility enable local adaptation and enhance stakeholder support. Governing networks from the top involve a balancing act, and the idea of fulfilling environmental objectives through the dynamic of network is appealing albeit challenging in practice.

1. Introduction

The contemporary trend in environmental policy incorporates an increasingly strong collaborative note. New governance structures based on the ideas of decentralisation and stakeholder involvement are commonly introduced as solutions to the ecological and social complexities associated with conservation management [1–3]. This movement denotes institutional changes, i.e. shifts in authority from the national level to the sub-national levels and from public authorities to collaborative structures composed of both public and private actors. Without questioning the position of the state, the role of government is changing since centrally imposed top-down control is being replaced by a focus on the facilitation of collaboration within various types of networks. Network governance thus replaces the traditional role of government as public authorities adapt to their new role of governing networks [4–7]. Sorensen and Torfing [7] identify several challenging dilemmas of network governance; how to balance between too excessive and insufficient governance, how to handle the conflict between effectiveness and inclusion and what level of authority that should be delegated to the networks, to mention some. Even though networks and networking have become central strategies for contemporary policymaking and implementation, across all policy sectors, prevailing understanding of how to deal with these challenges and how to govern networks from the top is restricted [8–10]. Within the field of environmental governance the function and performance of collaborative networks (cf. co-management studies) has been the primarily focus while the important role of the state, and public agencies, in governing these structures has been significantly downplayed. Thus, there is an urgent need for more knowledge about the opportunities and challenges that emerge as public agencies grapple with pursuing various governance strategies and how they can govern networks towards the fulfilment of environmental objectives.

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This paper addresses the aforementioned knowledge gap through an empirical study of network governance and its influence on outcome in the context of Swedish coastal management. The paper builds on an in-depth case study of a state-initiated pilot project aimed at implementing the principles of ecosystem-based management (EBM) that emphasises the fit and interplay between social-and ecological systems [11]. The specific objective of the project was to develop new management plans in line with the ideas of EBM, by means of collaboration networks, in five valuable coastal areas in Sweden. The project was initiated, and governed, by the Swedish Environmental Protection Agency (EPA) but was essentially triggered by several policy processes at the international, European, and national level, calling for an EBM approach [12–15]. The EPA invited five coastal areas, situated within the regions of Blekinge, Bohuslän, Stockholm, Västernorrland, and Östergötland, to participate as pilots in the project. Four areas constitute Baltic Sea MPAs protected by The Helsinki Commission [14] and the fifth is a MPA within the OSPAR convention [13]. This study examines how the Swedish EPA has governed the regional networks – and processes towards EBM – from the top.

1.1. Aim

The aim of the paper is to study the practice of environmental network governance, to illustrate the challenges and trade-offs that occur as various governance strategies interact and to discuss the possible effects of these on governance outcome. The study focuses on the Swedish EPA in its role as network governor and departs from the following questions:

- What governance strategies did the EPA adopt, what sphere of decision-making authority was left to the regional networks, and how did governance change over time?
- How far did the networks come in formulating new management plans that align with the ideas of EBM and to what extent did involved stakeholders stand by these plans?

Based on the above, some tentative propositions regarding the relationship between EPA governance, level of EBM and stakeholder support that emerge from the empirical analysis are suggested and discussed.

Even though the scope of the empirical study is restricted in size and geographical space, it clearly illustrates and problematizes the internationally widespread phenomena of network governance and strives towards ecosystem-based management in the realm of environmental policy. Thus, the relevance of the empirical findings extends the particular case of EBM in Swedish coastal management. The study suggests possible ways to promote transformation processes towards EBM but also highlights challenges in the emergent phenomenon of network governance – two fields still suffering from lack of empirical evidence.

In the forthcoming theoretical section, the concept of network governance, the meaning of different types governance strategies, and the notion of EBM and stakeholder support are elaborated.

2. Theoretical framework

The theoretical literature suggests some distinct criteria that separate public network governance from traditional governance (for a thorough discussion on different modes of governance [16]). While traditional public governance implies a top-down approach, based on the superiority of politics and a single authority implementation structure, network governance (here treated synonymously to network management) refers to governance via inter-organisational steering structures in which power and authority is divided among different organizations on several levels.

The activities of the public governor in these two governance modes diverge significantly; the 'controller', concerned with planning, designing, and leading the policy process, can be contrasted with the 'mediator', primarily occupied with guiding interactions and providing opportunities for collective action in various network settings. In this study, the term network governance is understood as the EPAs deliberative attempts to promote collaboration and goal fulfilment by affecting the characteristics of the network constellations on the regional level.

2.1. Different types of network governance strategies

Public managers can influence networks, and ultimately governance outcomes, by identifying key stakeholders, developing links among actors and guiding emerging relationships [17]. Several frameworks have been developed to describe and categorise different types of governance strategies [9,10,18,19]. This study draws primarily on Klijn [20] who divides strategies into two main categories: *institutional design* and *process management* (see Table 1). Although different in character they are all aimed at influencing the *substance,* i.e. the matter or elements of networking, the *structure,* defining the actors involved, or the qualities of the networking *process*.

Institutional design strategies are aimed at defining or changing the institutional characteristics of the network, i.e. the basic rules of the game. Three types of institutional design strategies can be differentiated (see Table 1, second column). Firstly, managers can influence the *network objective* by outlining the aim and scope of the process, by defining pay-off rules that encourage certain behaviour and by explicating the criteria that will be used to evaluate the process. Secondly, managers can influence the *network composition* by defining the criteria for involvement and decide how many and what types of actors should participate in the process and in what position. Thirdly, managers can emphasise their influence on *network interaction* by outlining the rules for interactions and decision making, thus establishing conflict resolution mechanisms and introducing certain working procedures.

Table 1
Governance strategies in theory (modified from Klijn [20]).

	Institutional design	Process management
SUBSTANCE	**Network objective:** define aim and scope of the network outcome, define payoff rules (i.e. the costs and benefits associated with certain actions and outcomes), define evaluation criteria	**Goal-achieving strategies:** facilitate goal congruency, create variation in solutions, influence and explicate perceptions, manage/collect information
STRUCTURE	**Network composition:** define 'actor set' by setting entry/exit rules; define roles/positions within the network	**Activation (deactivation) of actors and resources:** activate/deactivate certain actors and resources within the given structure, initiate new collaborations, influence coalition formation
PROCESS	**Network interaction:** define rules for interactions, define conflict resolution mechanisms, define rules for decision-making, define working procedures	**Organisational arrangements/interaction guiding:** create new organisational arrangements, impose process designs, mediate/broker, remove obstacles to and create incentives for participation