Competing Rationalities in Marine Ecosystem Services Management: Implications for the Polish EEZ

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Marine ecosystem services (MES) are the foundation of sustainable development in coastal areas. However, the management in the Polish Exclusive Economic Zone (EEZ) does not acknowledge this paradigm, but instead takes a sector-by-sector and case-by-case approach. Moreover, the participation of individual actors in decision-making processes is limited. The purpose of our paper is to examine the reasons for fragmented and short-term coastal management, its perceived detachment from the reality of interdependence between MES and economic development, and the competing rationalities of different institutional spheres involved (individuals and decision makers). We adopt an institutional framework, assuming rationality to be a pluralistic and socially constructed concept driven by various ideologies.

Our analysis addresses and re-defines key issues of coastal management: participation, integration, accountability and interdependence in relation to the Polish EEZ. In order to investigate the rationales supporting the objectives adopted in local development strategies, we studied the national marine spatial planning policy, the relevant national sectoral policies and the strategic documents of three coastal provinces and ten coastal towns and cities with more than 10,000 inhabitants. We used a content analysis to examine (i) the integration of management objectives, (ii) whether precautionary principles are followed, and (iii) whether benefits and future opportunities of MES are considered. In addition, we used a discourse analysis to analyze individual actors' approaches and their perceptions of MES in urban areas.

Analysis of the rationalities of institutional and individual actors revealed that neither consider MES crucial and instead, their motivations are ideological in terms of means and ends contested philosophy. This results in short-term goals which are often in conflict with the principles of sustainable development. Because of underfunding and unclear responsibilities, conflicts are not prevented but are addressed only once they have escalated. Moreover, MES seem to be one of the most undervalued elements in the planning processes where they tend to be limited to tourism and recreation only.

Although all the different institutional spheres acknowledge environmental issues, specific conservation and protection measures are not considered in detail: they are the subject of bounded rationality. We argue that before a compromise between different rationalities can be achieved, their paradigms need to be made visible and become a subject of public dialog on the basis of a democratic, pluralistic discourse within all the institutional spheres. The decision-making process needs to be made more transparent, science-based and participatory. These objectives require an institutional change in the process that transforms existing regimes in accordance with cooperative rationality. We argue that the estimation of the economic value of MES is crucial for improved MES management. It would also indicate the economic potential lost because of the current trade-offs between the environment and economic development most often solved in favor of the latter. This could be complementary to the already existing regulatory measures that aim to prevent further degradation of the recognized elements of marine ecosystems.

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