Understanding Policy Processes in Social-Ecological Systems: integrating political science frameworks into SES research

Kirill Orach*† and Maja Schlüter‡

1 Stockholm Resilience Centre – Stockholm, Sweden

Abstract

Social-ecological systems (SES) research aims to understand the dynamics of complex human-nature interactions. In doing so it draws on concepts and theories from diverse research fields. Frameworks originating in traditional fields such as economics, ecological, social or political sciences have a potential to uncover SES dynamics that lie within their respective domains. Particularly, better conceptualization of policymaking should lead to a deeper understanding of interactions between actors within the governance dimension of SESs. Our paper aims to make a contribution to the existing conceptual tools of SES analysis by supplementing them with concepts used in political science to study policy processes.

Governance systems create rules for resource users, however policymaking itself is subject to influence from a variety of actors and processes. Elinor Ostrom’s SES framework, frequently applied in studying of SES dynamics, approaches governance through prism of institutional rational choice. Yet its applications have often been limited to collective-choice problems in community management of natural resources and generally did not focus on policy process on higher levels of government. In a multi-level governance subsystem with a multitude of actors it is also important to account for interests of policymakers and power relations. In this contribution we present an in-depth analysis of the most used conceptual frameworks of the policy process (such as Advocacy Coalition Framework, Multiple Streams, IAD and others) and discuss their suitability for understanding internal dynamics of the political subsystem of SES. The frameworks are analyzed based on factors that define their main features, such as the model of individual decision making, conceptualization of a policy process, institutional setting, consideration of information and power in the policy process. We also look at framework’s suitability for addressing environmental policy problems common in SES, which are characterized by complexity, uncertainty and often transcend national boundaries. We do not attempt to develop a ”one-size-fits-all” solution to address all the complexity of SESs, as that would be an impossible task. Rather, we hope to come up with a combined theoretical lens which would allow us to address interactions within political subsystems that are often left out of the analysis of SESs dynamics.

Using the potential of these frameworks we hope to explore the interplay of governance actors in the multi-level governance of a SES such as the Baltic Sea. Preliminary analysis shows that combined Advocacy Coalition Framework and Networks approach could be useful for this case, as it appropriately describes a policy process that involves a multitude of actors and accounts for actors’ attitudes and beliefs. Considering that policy process and institutional

*Speaker
†Corresponding author: kirill.orach@stockholmsresilience.su.se
‡Corresponding author: maja.schlueter@stockholmsresilience.su.se
change create rules for the interaction between resource users and ecological systems, we will further combine our approach with a framework that conceptualizes implementation of rules (e.g. Management Strategy Evaluation) and resulting ecological implications. The multiple-lens strategy should give us a broader perspective on processes of change within the social system, while maintaining complex SES approach.

**Keywords:** Frameworks, Governance, Institution, Interdisciplinary, Multiple perspectives, Social, ecological systems