An entitlements approach for the analysis of ecosystem service benefits in the western Indian Ocean

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Abstract

Ecosystem services are supplied by nature and deliver ecosystem benefits to people. Assessments tend to focus on the supply of ecosystem services, assuming this automatically generates benefits to people. However, this ignores a large body of relevant social science literature that examines how different people gain entitlements that enable them to benefit from nature. A critical question for ecosystem service science is therefore: what determines the distribution of ecosystem service benefits between different sections of society? Here, we use an entitlements approach to determine whether access mechanisms (e.g. access to markets, capital, or knowledge) are related to people’s perceptions of coral reef ecosystem service benefits across four countries in the western Indian Ocean (Kenya, Tanzania, Madagascar, and Seychelles). We find that access is strongly related to how people perceive benefits from ecosystem services. There are broad similarities across countries studied in how people gain access to and are able to benefit from specific ecosystem services. Social access mechanisms (e.g. access through social relations) in particular are associated with the largest number and diversity of benefits. Furthermore, local context strongly determined how people perceived benefits: a specific access mechanism can enable people to benefit from a certain ecosystem service in one context, but hinder the ability of people to benefit from the same service in a different context. Ecosystem service assessments and their resultant policies should address the mechanisms by which different people benefit from a supply of ecosystem services. This talk is for the session entitled: "Achieving Resilience in Small-Scale Fisheries: Applying Emerging Frontiers in Social-Ecological Systems Research."

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