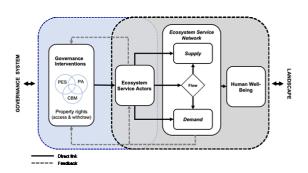


Connecting governance interventions to ecosystem services provision networks Jean Paul Metzger, Pedro Fidelman, Claudia Sattler, Barbara Schröter Martine Maron, Felix Eigenbrod, Marie-Josée Fortin, Camila Hohlenwerger and Jonathan R. Rhodes

Human well-being is highly dependent on the benefits provided by nature, also known as ecosystem services. These services, nevertheless, are threatened by the loss and degradation of ecosystems, both managed and unmanaged. Halting and eventually reversing this trend will require more efficient ways to manage our landscapes. In this paper, we integrate social science research on landscape governance and natural science research on the mechanisms that regulate ecosystem services provision into a conceptual framework of ecosystem services landscape governance. The proposed "landscape governance framework" allows the linkage of different types of governance interventions, e.g. creation of protected areas (PA), payments for ecosystem services (PES), and community-based management (CBM), with changes in the landscape structure, and thus in areas of supply, demand and flows within ecosystem service provision networks. This allows us to identify where and how interventions act on the landscape and on the services provision networks. This, in turn, facilitates the identification of appropriate actions for different problematic situations (undersupply, overdemand or insufficient flow to connect areas of supply and demand). The proposed framework can also be used to identify critical links and nodes in the networks, as well as the level of interdependence between the components, to determine the resilience and vulnerability of the whole network. This framework combines knowledge of the social and natural sciences into a unifying and widely applicable framework, which forms a basis for stimulating research in the field of spatial governance of ecosystem services. Its aim is to contribute towards more sustainable landscape management and, as a result, improved human well-being.



The proposed 'landscape governance framework' relating governance interventions to 'ecosystem services provision network' (and then to human well-being) through ecosystem service actors' effects on supply, flow and demand of ecosystem services.

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