
Mobilization of the ecosystem services concept for integrated regional management: an application for the Grenoble urban region (France)

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Abstract

The concept of ecosystem services enables a renewed formulation of development planning issues, by proposing new interpretations of land-use issues and decisions, and integrating the contributions of ecosystems to human well-being, including natural resources, landscape amenities, recreation, the capacity to purify pollutants (water and air), etc. Indeed, ecological processes generate positive externalities which, because of threats on ecosystems, become key issues for sustainable land management and planning.

We will focus on the use of the conceptual and methodological framework of ecosystem services as an interface between ecosystems and social systems in the process of building an integrated approach to land management. The urban area of Grenoble will be used as case-study, where we will focus on the role of ecosystem services in local and regional stakeholder networks and the governance of land management decisions.

We propose here to identify stakeholder perceptions and values associated with ecosystem services (and biodiversity), as well as knowledge of the concept itself, and to untangle the mechanisms of decision making. An analysis using ecosystem services networks will draw attention to the joint production of multiple services, related to underlying ecological processes, by analysing explicitly the dependencies between provisioning and cultural services targeted by management, biodiversity and regulation services underpinning their production, and regulation and cultural ecosystem services impacted by management.

Keywords: Ecosystem services, biodiversity, socio ecological system, territorial development

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