



Special Session Proposal

Ecosystem Services Quantification and Regional Science: Addressing pitfalls

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Abstract

Ecosystem services refer to the direct or indirect benefits humans obtain from ecosystems which support their survival and quality of life. The conceptual classification of ecosystem services into supporting, provisioning, regulating and cultural services is widely accepted and used as the main analytical framework for their assessment. Using this framework an impressive quantity and quality of studies focused on what ecosystem services are, their reciprocal relations, and assessment efforts have been produced in the last years. However, a comparable development has not been achieved regarding the quantification and valuation of ecosystem services. Quantification efforts are actively being questioned with no apparent convergence towards consensus. There are several possible explanations for the difficult to achieve a common ground in ecosystem services valuation. Among others: (1) The fact that the usual classification is ill suited for the identification of the beneficiaries since it is usually not clear to whom the ecosystem services are provided. (2) The difference between ecosystem services that are provided at a local or a global level is not always accounted appropriately. (3) The aggregation of ecosystem services in “bundles of services” is a useful simplification but obscures the analysis of individual services and their specific impacts. (4) The extensive and widespread assessment of "cultural services" at the expense of other types of ecosystem services further complicates the quantification of the later. These possible explanations are not necessarily agreed among the scientific community interested in the study of regional science and ecosystem services. This session aims to attract researchers interested to discuss these topics while sharing their methods, test cases, results and, above all, their ideas regarding the proper quantification and valuation of ecosystem services, and their incorporation as legitimate tools in regional science.