No Root, No Fruit – Sustainability and Ecosystem Services

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Abstract

Current research and practice on Ecosystem Services (ES) is advancing in trade-off analysis, comparing potential and actual delivery to various societal demands. However, this ‘efficiency’ is only one of the three central ES values (and of the three components of sustainability). Optimizing efficiency is important, but determination and consideration of (1) limits to the use related to ecological resilience and (2) equitable sharing of the earth’s resources is central in root literature of both sustainability and ES, but underrepresented in current research and practice. This presentation confronts the ES concept with the theoretical and practical sustainability context.

The origin of the research field and concept of biodiversity, natural capital and ES is indeed rooted in sustainability thinking. The explicit link between sustainability and ES assessments stresses the importance of three values of ES: ecological sustainability and resilience, social fairness and distribution, and economic efficiency. Conclusively, the final goal of ES valuation is to achieve a more sustainable resource use, contributing to wellbeing of every individual, now and in the future by providing an equitable, adequate and resilient flow of essential ES to meet the needs of a burgeoning world population.

Until now, there is reluctance to fully embrace the message that by ignoring the dependence on our ‘natural capital’ we are literally living at the expense of the poor and the future generations. Still, the ES concept could be an effective lever to contribute to sustainable development with more than just lip service. This concept has been picked up widely, percolated in many policy documents and is being implemented in a variety of contexts including for the management of multifunctional landscapes. As the time left to effectively tackle sustainability challenges is running out, as resilience of many local systems is eroded, their thresholds crossed, and future ES supplies jeopardized; urgent refocusing of ES research and -more importantly- practice on its strong sustainability roots is essential. This conclusion directly arises from the methodological and conceptual challenges for ecosystem service valuations developed in the recent book entitled ’Ecosystem Services – Global Issues, Local Practices’ (Jacobs et al. 2013), echoes in many reflections from practice, and mirrors current scientific opinions on the topic.

In this presentation, we will develop four points that should be kept in mind and transparently addressed if ES research, governance and practice have to contribute to a truly sustainable multifunctional and resilient landscape management. We believe these are crucial items that should be considered when engaging in trade-off analysis.

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