

Ecosystem services as a framework for integrative transdisciplinary research

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Ecosystem services have become a highly popular concept in research and interests from the policy and practical decision making sides are steadily increasing. Prospects of the ecosystem service concept to become a major tool in environmental management are promising. At the same time, expectations of and pressure from practitioners and scientists are raised. Major challenges in related integrative transdisciplinary assessments are the high complexity of the ecosystem service topic itself and the need for universally applicable concepts and methods. Different ecosystem service classification systems (e.g. MEA, TEEB, CICES) and varying understanding of ecosystem service supply-benefit delivery chains among scientists have inhibited broad-scale practical applications so far.

Therefore, concepts on a) how ecosystems produce services including the different ecosystem service delivery components, b) how to consistently quantify ecosystem service stocks and flows, c) how services relate to each other (trade-offs) and d) how landscape changes affect future service delivery are needed. Moreover, most of the currently available ecosystem service studies consider ecosystem service supply only whereas the ecosystem service demand side has not been sufficiently addressed in most studies. The integration of societal needs and values for goods and services is mandatory in order to enhance currently applied function-oriented landscape planning approaches and environmental management strategies. This reveals the full application potential of the ecosystem services framework. New concepts, challenges and ideas of ongoing transdisciplinary ecosystem service research will be presented and discussed during the seminar.