2018 ISDRS Conference, Messina, Italy, 13-15 June 2018

Track 3c: Ecosystem services (definition, measurement, multi-criteria valuation)

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Goals and objectives of the track

Biology in its descriptive phase used to document the characteristics of observed nature. Progressing from ecosystem traits to functions is the step one from a descriptive approach listing observed facts and figures to analytical science, characterising any ecosystem phenomenon contributing to something else (i.e. almost everything) as an ecosystem function. The next step, from ecosystem functions (ESF) via ecosystem service potentials (ESP) to ecosystem services (ESS) is one from scientific analysis to subjective selection and classification according to usability criteria: humans see use potentials in certain functions and manage the system to maximise the expected benefits. Already the step of defining the ESP is one shaped by diverging interests and societal power relations: whoever succeeds in determining the ESP definition will see her desired ESS being produced, usually with the investment of energy, resources, labour and money to pay for all that. This investment also co-determines who is entitled to appropriate the ESS and reap the valuable ecosystem service benefits (ESB).

The contributions of biodiversity and ecosystems to human sustenance and well-being are increasingly recognised beyond scientific circles, as the frequent use of terms like "biodiversity" and "ecosystem services" testifies. However, so far both the discourse and the numerous (mostly monetary) assessments have globally failed to change the order of political priorities, and thus the loss of both, biodiversity and ecosystem services, continues.

In the context of the conference focus "from theory to practice", papers would be particularly (but not exclusively) welcome dealing questions such as

- Which kind of valuation is appropriate for which purpose? While for bio-scientists the value of biodiversity lies in the importance of a function for the functioning of the ecosystem (and in the case of political ecologists the value lies in the functioning of society), for economists the value is defined as a market price (real or hypothetical) in real or hypothetical markets.
- What is the current state of knowledge on the cause-effect relationships that underpin human-driven impact pathways from ESF to ESB and back to ecosystems? And how these complex relationships can be operationally captured by the next generation of ecosystem service decision support tools for policy makers?
- Why has valuation mostly failed to impress politics? What should be measured, and how, in order to change that? How should valuation results be presented, and to whom?
- Which non-monetary valuation methods and assessment tools have stood the test of reality, and how successful have they been? Can they provide the evidence needed as a basis for decisions? Can experiences from local cases be generalised, and if so, how?
- In which cases could economic arguments improve decision making? In which cases would they be irrelevant, and in which ones counterproductive (economically superfluous biodiversity, welfare optima by species extinction,...)? How should scientists deal with economic arguments if they can be supportive but also counterproductive for the case at stake, depending on external factors?
- How is the interaction of ESS and ecosystem disservices taken into account in the different valuation methods?
- Are the methods culture, distribution and gender sensitive?
- As the very definition of what is an ESS influences who gains and who loses, and as the definition needs to be standardised if protection is to be legislated, who should decide what is an ESS? Does the scientific competence count, or the legitimacy of democratic authorities?

You may submit your abstract by visiting the Ex Ordo abstract submission system (you will be required to setup an account first): *http://isdrs2018.exordo.com*

Deadline for abstracts: 20 December 2017