

SESSION DESCRIPTION

ID: T1

Guidelines, tools and standards for integrated ecosystem services assessments

Hosts:

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Abstract:

The general objective of this session is to contribute to improve, and harmonize guidelines, toolkits, data bases and standards for implementing integrated ecosystem service assessments (ESA). Four main topics will be addressed in this session to allow cross-fertilizations between state-of-the-art practices, methods and tools for incorporating ESA in decision-making:

1. Guidelines: building on previous ESP conferences, notably ESP 9 World conference in Shenzhen (2017) and ESP 10 World Conference in Hannover (2019), guidelines for integrated ecosystem services assessment (ESA) have been developed (www.es-partnership.org/esp-guidelines/). In this session, lessons learnt from other guidelines and frameworks will be shared and discussed to explore how these guidelines can be further improved and, possibly adopted as official ESP Guideline.
2. Life Cycle Assessment (LCA) and standardization. Latest advances in the ES-LCA literature show promising avenues to develop ES accounting in LCA and overcome the current taxonomic and methodological challenges, such as knowledge gaps on how to inventory ES flows along products life cycles, and/or how to increase the accuracy, transparency and replicability of ES assessments inspiring on the International Organization for Standardization (ISO) approaches used in LCA.
3. ES Valuation Databases. To support the implementation of ES-Assessment guidelines and LCA guidelines, advances in databases are needed to improve our knowledge about value functions, assessments, and dependencies as well as to increase data availability for benefit

transfer. Several ongoing initiatives will be presented (e.g., ESVD (www.esvd.info), ESValues (<https://www.esvalues.org/>), TEER (<https://www.fao.org/in-action/forest-landscape-restoration-mechanism/our-work/gl/teer/en/>)). Moreover, the session aims to expand the discussion on benefit transfer as a valuation approach for ES, going deeper into the main obstacles for the generation of databases, learn from best practices in the generation of benefit transfer databases and discuss the key elements that the next generation database for the valuation of ecosystems and their services must satisfy.

4. Standards. Assessments and valuations can be criticized for lack of accuracy, comprehensiveness and quality, which in turn can lead to a 'credibility deficit' if they are not accompanied by robust verification, certifications and audits. Most certification programs to-date focus on a single resource or commodity, or address only a narrow definition of sustainability. However, new initiatives that assess environmental protection, ecological restoration, ecosystem services, and sustainable production outcomes and impacts in an integrated manner are gradually emerging. An overview will be provided of the most promising certification and standardization processes, including those pursued by the International Organization for Standardization (ISO).

This session will explore common challenges, synergies and overlaps between complementary research fields, and interactive web-based databases to support environmental decision-making, creating the foundations for an international ES assessment and management standard as well as new directionalities to capture the value of environmental externalities and embed it into decision-making through robust guidelines, toolkits, databases and standards.

Goals and objectives of the session:

The session aims to provide a platform to share and discuss the latest developments regarding ES-assessment Guidelines, Tools and Standards.

Public and private sector investors, multilateral and intergovernmental authorities, regulators, landowners and land users, require best-in-class, customized and harmonized standard monitoring and management practices, instruments and guidelines to systematically incorporate ES considerations in their decision-making processes. Mainstreaming ES knowledge into policy and decision-making practice requires the harmonization of definitions, the standardization of classification processes, the generation of comprehensive databases and the streamlining of methodological and epistemological properties of ES accounting, quantification, valuation and mapping approaches.

Planned output / Deliverables:

1. Production of Special Issue on ESA Guidelines, Tools and Databases

A collection of papers presented during the workshop will be submitted as Special Issue to Ecosystem Services <https://www.sciencedirect.com/journal/ecosystem-services>

2. Contribute to a special issue on integrating ES into LCA

A special issue addressing LCA and ES research and application questions is currently in preparation for the Ecosystem Services journal

<https://www.sciencedirect.com/journal/ecosystem-services>

3. Establishment of a working group to further develop the ESA-Guidelines in combination with web-based support tools and ESA and Valuation Databases in collaboration with the existing ESP Task Forces on Guidelines & Tools and TF on Databases. Possibly to be combined with a new initiative from ELD to set up a `Valuation Harmonization Database`.

Session format:

Combined standard session (short presentations) and discussion forum

Voluntary contributions accepted:

Yes, I allow any abstract to be submitted to my session for review

Related to ESP Working Group/National Network:

[Thematic Working Groups: TWG 1 – ES Assessment frameworks & Typologies](#)