

SESSION DESCRIPTION

ID: T5b

Emerging research on current trends and future scenarios of the nature–water–food–health–climate nexus: Informing the IPBES Nexus Assessment

Hosts:

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Abstract:

Threats to biodiversity and ecosystem services are entwined with threats to our climate, food and water systems, and human health. However, actions taken to address such threats are frequently considered in silos and thus can undermine each other leading to trade-offs or unintended consequences. Siloed approaches also fail to take advantage of co-benefits or synergies between policies/decisions.

Recent science–policy assessments (e.g. the IPBES Global Assessment) have highlighted the need for holistic solutions when addressing current societal and environmental sustainability challenges. They have highlighted the nexus thinking as a useful lens to consider multiple interactions in both global and local social–ecological systems. In particular, the nexus between biodiversity/nature/ecosystem services, food production and consumption, water provision and human health has been highlighted as a key one, including its interactions with climate, energy production and other driving forces.

In this respect, the currently developed IPBES Nexus Assessments (<https://ipbes.net/nexus>) seeks to synthesise available knowledge on the nature–water–food–health Nexus, its role in sustainable development, potential threats and options for policy responses.

This double-session aims to collect novel and emerging research on the current trends and potential future development of the Nexus interactions in order to inform the upcoming IPBES Nexus Assessment and provide state-of-the-art input into its synthesis of available knowledge. The session will include presentations that describe, review, synthesise and/or evaluate nexus interactions (between biodiversity and ecosystem services, water provision, food systems, human health and climate change) in terms of their environmental, social and economic costs and benefits, including any synergies and trade-offs among the multiple dimensions of the nexus. Presentations that attribute trends in important nexus interactions to drivers, particularly in terms of how actions or policies have affected or can affect elements of the nexus relative to the SDGs, will also be welcome.

The first part of the session will include studies focusing on recent and current trends in the nexus interactions. The second part of the session will focus on studies (including integrated modelling studies) exploring potential future development of the nexus interactions. We particularly invite contributions addressing three or more nexus elements.

In order to capture a variety of resources, the double-session welcomes both quantitative and qualitative studies, including studies originating from non-scientific sources (e.g. indigenous and local knowledge, practitioners' knowledge).

The session will feed into a collection of available studies to be potentially incorporated in the IPBES Nexus Assessment chapters on current and future trends of the Nexus. Its contribution will be summarised in a perspective article co-authored by the session co-hosts and the presenting authors.

Goals and objectives of the session:

The session has three main goals:

1. To showcase and discuss emerging research on current and future interactions within the Nexus.
2. To establish a collection of available and forthcoming studies to be potentially incorporated in the IPBES Nexus Assessment.
3. To draft a perspective piece on the current frontiers of the Nexus research.

Planned output / Deliverables:

1. Discussion minutes
2. Publicly available database of collected studies
3. Perspective piece outline

Session format:

Other (Speed talk/lightning sessions)

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 5 – Modeling ES](#)