I. SESSION DESCRIPTION

ID: T6c

Justice, distribution, conflicts and power relations in ESS definition and assessment:

Hosts:

<table>
<thead>
<tr>
<th>Host:</th>
<th>Title</th>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Joachim H. Spangenberg</td>
<td>Helmholtz Centre for Environment Research &amp; Sustainable Europe Research Institute SERI Germany</td>
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<tr>
<td>Co-host:</td>
<td>Dr.</td>
<td>Johannes Langemeyer</td>
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</table>

Abstract:

Equity, justice and conflicts and the power relations shaping them are still widely overlooked dimensions in many Ecosystem Services (ESS) research and practice. Despite the success of the ‘integrated valuation school’ (Jacobs et al. 2017) to put social, moral, ethical and other concerns on the research agenda, ES research and practice remain widely dominated by standard economic optimisation procedures. The current introduction of Nature’s Contribution to People (NCPs) by the International Panel on Biodiversity and Ecosystem Services (IPBES) highlights the need to reconcile the moral and the analytical dimension of ESS. This includes the need to stronger consider the social dimension in ES research, including further discussion between scientifically robust and politically effective terminology and analyses. In this session, we discuss how to mainstream social/conflict issues into ES research and application, both conceptually and methodologically. We embrace a perspective of social/environmental justice to better conceptualize conflicting dimensions of ES and ecosystem disservices (EDS). Furthermore, we aim at discussing
methodological requirements for ESS / EDS assessments to stronger account for trade-offs, (hidden) conflicts and equity, addressing the following core questions:

- How to address trade-offs between different ESS/EDS, stakeholders, benefits and detriments (across social groups – spatial and temporal scales)?
- Are there different types of EDS, how can they be classified, which ones are important for the overall ESS concept?
- How to balance local vs. global in ESS / EDS determination and relevance assessment?
- What is the role of international trade in ESS provision (embodied ESS in trade)? (tele-coupling; production based and the consumption based accounting)
- How to deal with tensions between inter- and intra-generational justice in ESS/EDS trade-offs?
- Which role do the subjective and the objective definition of ESS, and the power relations they represent, play in the real-world application?
- How has the ESS discourse been abused to drive extractive activities and socially invasive change?

The overarching goal of this session is to show pathways for (a) awareness raising, (b) assessment, (c) avoidance and (d) reduction of ESS/EDS trade-offs and conflict.

The additional questions we developed in Shenzhen about morality, valuation etc. are not forgotten but stored for subsequent discussions!!

Goals and objectives of the session:

The purpose of the discussion is further refining and beginning to answer these questions.

Planned output / Deliverables:

The result may be a publication, or further work in a subgroup of ESP WG T6. The synthesis could also serve as input to different Thematic Groups (e.g. 6, 8, 10, 14, 18) which are all exposed to the problem to some degree without it being their core theme.

Related to ESP Working Group/National Network:

Thematic Working Groups: T6 – Integrated valuation of ES
## II. SESSION PROGRAM

**Date of session:** Tuesday, 16 October 2018  
**Time of session:** 8:45 – 13:00

### Timetable speakers

<table>
<thead>
<tr>
<th>Time</th>
<th>First name</th>
<th>Surname</th>
<th>Organization</th>
<th>Title of presentation</th>
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</thead>
<tbody>
<tr>
<td>8:45–9:00</td>
<td>Johannes</td>
<td>Langemeyer Joachim H. Spangenberg</td>
<td>UAB SERI Germany</td>
<td>Welcome, Introduction to the session</td>
</tr>
<tr>
<td>9:00–9:15</td>
<td>Béla</td>
<td>Kuslits</td>
<td>Hungarian Academy of Sciences, Centre for Ecological Research</td>
<td>Social Network Analysis in Management of Ecosystem Services</td>
</tr>
<tr>
<td>9:15–9:30</td>
<td>Rita</td>
<td>Lopez</td>
<td>Centre for Environmental and Sustainability Research – NOVA University Lisbon.</td>
<td>Social Network Analysis and power relations: An approach to understand the effect of stakeholder’s behaviour in ESS management</td>
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<tr>
<td>9:30–9:45</td>
<td>Améline</td>
<td>Vallet</td>
<td>Ecologie Systématique Evolution, AgroParisTech, CNRS, Univ. Paris–Sud, Université Paris–Saclay</td>
<td>Linking equity, power and stakeholders’ roles in relation to ecosystem services</td>
</tr>
<tr>
<td>9:45–10:00</td>
<td>Christina</td>
<td>Von Haaren</td>
<td>Leibniz University Hannover, Institute of</td>
<td>Trapped in a multipole power field – Cross-national comparison of how legislation, the planning system, and</td>
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<tr>
<td>Time</td>
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<tr>
<td>10:00–10:15</td>
<td>All</td>
<td>Participants</td>
<td>ESP Europe</td>
<td>Discussion section 1: Power relations and ESS planning &amp; management</td>
</tr>
<tr>
<td>11:30–11:45</td>
<td>Felipe</td>
<td>Benra</td>
<td>Helmholtz Centre for Environment Research; iDiv, Leipzig</td>
<td>A trilogy of distribution inequality: land, forests, and ecosystem services</td>
</tr>
<tr>
<td>11:45–12:00</td>
<td>Karen</td>
<td>Mullin</td>
<td>University of Leeds</td>
<td>Assessing the social distribution of natural capital and ecosystem services in England</td>
</tr>
<tr>
<td>12:00–12:15</td>
<td>Susanne</td>
<td>Raum</td>
<td>Imperial College London, Centre for Env. Policy</td>
<td>A framework for integrating systematic stakeholder analysis in ecosystem services research</td>
</tr>
<tr>
<td>12:15–12:30</td>
<td>All</td>
<td>Participants</td>
<td>ESP Europe</td>
<td>Discussion section 2: Distribution, social impacts and ESS planning &amp; management</td>
</tr>
<tr>
<td>12:30–13:00</td>
<td>Johannes</td>
<td>Langemeyer</td>
<td>UAB SERI Germany</td>
<td>Future work planning: how to strengthen the social and political dimensions of ESS assessments, policy, planning and management</td>
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</table>
All these uses constitute ecosystem services with a positive value for humans, but due to the trade-offs, many of them can if pursued turn into a disservice for those demanding a competing service.

**Keywords:** Ecosystem disservices, co-generation, distribution, conflicts

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**9. Type of submission:** Abstract

**T. Thematic Working Group sessions:** T6c Justice, distribution, conflicts and power relations in ESS definition and assessment

**Linking equity, power and stakeholders’ roles in relation to ecosystem services**

**First author:** Améline Vallet

**Other author(s):** Bruno Locatelli, Harold Levrel, Nicolas Dendoncker, Cécile Barnaud, Yésica Quispe Condé

**Affiliation, Country:** Ecologie Systématique Evolution, AgroParisTech, CNRS, Univ. Paris–Sud, Université Paris–Saclay, France

The issues of power and equity are gaining attention in the research on ecosystem services (ES). Stakeholders who benefit from ES are not necessarily able or authorized to participate in ES management. We propose an analytical framework for identifying and qualifying stakeholders’ roles in relation to ES flows. Building on existing frameworks in the ES literature, we specifically aim at unraveling the different direct and indirect management contributions to ES flows, and at linking them with ES benefits. We apply this framework to the Mariño watershed (Peru) to describe stakeholders’ roles using a set of eight ES, and we discuss the implications of our findings in terms of equity and power. We conducted face-to-face semistructured interviews with representatives of 52 stakeholders of the watershed to understand how they managed ES and benefited from them. We used statistical analysis (permutation tests) to detect significant differences between stakeholder sectors (civil society, NGOs, business, public sector) and scales (from local to national levels). Indirect forms of ES management were more frequent than direct ones for all ES, and water quantity, water quality and agricultural production received the most management attention. The differences we observed between ES benefits and management could result from intentional choices (e.g. preferences for local benefits). We also found clear differences between those who managed ES and those who benefited from them. ES benefits were higher for local stakeholders and the business sector, while public organizations and NGOs were the most involved in ES management. These inequities reflected the different rights and capabilities of
stakeholders to benefit from or participate in ES management. They also emanated from spatial and structural interdependences between stakeholders. Participatory governance of ES could offer solutions to enhance both distributive and procedural equity.

**Keywords**: Ecosystem management, Ecosystem Services Governance, Environmental justice, Landscape sustainability, Tradeoff

10. **Type of submission**: Abstract

T. Thematic Working Group sessions: T6c Justice, distribution, conflicts and power relations in ESS definition and assessment

Trapped in a multipole power field – Cross-national comparison of how legislation, the planning system, and public participation shape the conditions for ecosystem service planning and evaluation

**First author**: Christina von Haaren, Rachelle Alterman

**Affiliation, Country**: Leibniz University Hannover, Institute of Environmental Planning, Neaman Institute for National Policy Research, Technion Haifa, Israel, Germany

Good environmental planning and resulting implementation relies on efficient and transparent ways to evaluate ecosystem services (ES). Many countries have already begun to map and assess ES, but the discussion of what is the “right” evaluation approach is still incomplete. Not enough research attention has been directed to each country’s governance context and how it shapes the conditions for ES evaluation and implementation. There is a gap in knowledge both on the theoretical level and on the empirical level. The double aim of this paper is, first, to propose a theoretical framework to characterize the key aspects of governance for ES evaluation; and second, to apply this framework to the real-life contexts of selected national (or subnational) jurisdictions. Four advanced economy countries are analysed as examples: the USA/Oregon, Japan, Germany, and Israel. They share a common denominator important for any cross-national analysis: All are OECD member countries with (relatively) functioning democracies and public administrations. At the same time, the four countries exhibit a variety of physical-geographic and socio-cultural characteristics. We hypothesize that these may have both positive and negative influences on the options for designing appropriate modes of ES evaluation and planning. The theoretical framework conceptualizes the governance context as the interplay between types of legislation, degrees of participation opportunities, and division of planning authority along spatial or political
Linking equity, power and stakeholders’ roles in relation to ecosystem services

Améline Vallet
Bruno Locatelli
Harold Levrel
Nicolas Dendoncker
Cécile Barnaud
Yésica Quispe Condé
Power, equity and ecosystem services

• Addressing power and equity issues is crucial for more sustainable, equitable and resilient governance of ecosystems and their services (Berbés-Blázquez et al. 2016)

• The concept of ecosystem services is poorly related to the questions of equity, power and environmental justice (Ernstson 2013; Felipe-Lucía et al. 2015)

• Stakeholders play different roles in relation to the distribution of ES or natural resources and their management (Schlager and Ostrom, 1992)

• Distributive vs. Participation equity (Cutter, 1995, Schlosberg, 2003)
Stakeholders who benefit from ES do not always participate in ES management

“Only those who live in the protected area can collect medicinal plants”
“Why could we be banned?”
Questions and objectives

• Who participates in ES management? How are ES managed? How are benefits distributed among stakeholders?
• Propose an analytical framework for identifying and qualifying stakeholders’ roles in relation to ES flows
• Apply and test it in a real-world situation
Analytical framework
Analytical framework

- Ecosystem
- Service
- Use
- Benefit

Society
Analytical framework
Analytical framework
Study Site

• Andean watershed (Mariño), Peru
• 284 km²
• Agroforest mosaics
• Presence of a protected area (Ampay Sanctuary)
• Environmental conflicts (water scarcity, urbanization boom, mining activities)
Methods

- Selection of ecosystem services
- Identification of stakeholders

Workshops
Methods

Workshops

- Selection of ecosystem services
- Identification of stakeholders
Methods

Workshops

- Selection of ecosystem services
- Identification of stakeholders
Methods

Workshops

- Selection of ecosystem services
- Identification of stakeholders

52 interviews

- What are the services you benefit from?
- What are the services you manage? How?
Methods

Workshops

- Selection of ecosystem services
- Identification of stakeholders

52 interviews

- What are the services you benefit from?
- What are the services you manage? How?

Analysis

- Qualitative description
- Retranscription and coding
- Statistical analyses
Who benefits from ecosystem services?

Significantly less

Significantly more

Being beneficiary

Yes

No

Business
Civil society
NGO
Public Sector

Local
Regional
National

Significantly less

Significantly more
Stakeholders benefited from different numbers of ES
How are ES managed?
Who manages ecosystem services?

<table>
<thead>
<tr>
<th>Form of management</th>
<th>Business</th>
<th>Civil society</th>
<th>NGO</th>
<th>Public Sector</th>
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<tbody>
<tr>
<td>Direct</td>
<td><img src="image" alt="Bar chart" /></td>
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<table>
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<tr>
<th>Form of management</th>
<th>Local</th>
<th>Regional</th>
<th>National</th>
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<tbody>
<tr>
<td>Direct</td>
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<td>Indirect</td>
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</tbody>
</table>

Significantly less: Red
Significantly more: Blue
Stakeholders managed different numbers of ES
Stakeholders who benefit from ES do not necessarily participate in ES management.
Conclusions

• Clear differences between those who managed ES and those who benefited from them (Alonso Roldán et al., 2015, Ernstson et al., 2008, Felipe-Lucia et al., 2015)

• Some stakeholders have the power to control directly or indirectly ES flow... And other not!

• Different from formal power

• Why does this matter?
  • Reduced adaptive capacity of the system (adaptation issue)
  • Mistrust in institutions that manage natural resources (legitimacy issue)
  • Created/enhanced conflicts (social unrest issue)
Thanks for your attention!

If you have questions or comments on this presentation:

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