



BOOK OF ABSTRACTS

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I. SESSION DESCRIPTION

ID: T18a

Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance

Hosts:

	Title	Name	Organisation	E-mail
Host:		Carsten Mann	Eberswalde University for Sustainable Development, Germany	carsten.mann@hneue.de
Co-host(s):		Lasse Loft	Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany	lasse.loft@zalf.de
		Christian Schleyer	Institute of Geography, University of Innsbruck, Innsbruck, Austria	christian.schleyer@uibk.ac.at
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Abstract:

The provision of ecosystem services (ES) is largely coordinated by policies and other institutions that guide human intervention across policy sectors and from local to global level. Different policy sectors such as agriculture, forestry, nature conservation, spatial planning, energy, rural development target different types of ecosystem services. Sector-related policy objectives can be mutually supportive; however, some of them are also ambiguous, often leading to conflict after implementation. Besides a need for policy integration and horizontal interplay, vertical multi-level policy and stakeholder interactions are crucial for ES provision, because international regulations and policy strategies are translated and implemented on national, regional and local levels. Even though many ES are promoted in various international policy agendas such as the UN Convention on Biological Diversity and the Framework Convention on Climate Change, the EU Green Deal, the EU Biodiversity Strategy, or the EU Forest Strategy (Wolfslehner et al., 2020), the development



and implementation of policy instruments at local level and the operational management that promotes ES-related land-use objectives lag behind (Angelstam et al., 2018; Lindahl et al., 2017).

In this session, we take a closer look at such horizontal and vertical policy interactions for ES provision and how they manifest on the local level of implementation. We focus in particular on concepts and methods for policy and institutional analysis that are rooted in political sciences, institutional economics, planning, and other social science disciplines that help to better understand policy processes, strategies, and multi-sector and multi-level interactions for ES provision: How are policy instruments/policy mixes designed and combined? How are they integrated into institutional structures and adapted to concrete/diverse implementation contexts? These are only some of the questions we would like to discuss. Of particular interest are contributions that elaborate on:

- Analysis of institutional interplay and fit
- Translation of policy objectives across levels (from policy design to implementation)
- Trade-offs in policy design and policy mixes
- Policy design: From ideal models to real-world adaptation

Throughout the session, an overview of concepts and methods for empirical policy and institutional analysis shall be gained. Besides conceptual-methodological inspirations from social science disciplines, empirical findings on multi-sector and multi-level interactions can help us to demonstrate challenges of policy design, trade-off negotiations and stakeholder inclusion.

The mosaic of papers seeks to broaden the perspective and understanding on how ES provision in Europe can be more effectively, efficiently (or cost-effectively) and equitably coordinated by policies. These insights serve as the basis for a more targeted policy design and development to address the main societal challenges and needs for sound ES provision.

Goals and objectives of the session:

The goal of the session is to gain insights into policy analysis, policy design, and policy interactions. Therefore, the session seeks to provide an insightful view of recent research and approaches from ES sciences, policy and practices. It further aims to facilitate a debate on possible ways forward in terms of policy analysis and policy design.

Planned output / Deliverables:

The outcome might be a Special Issue on Insights into policy analysis and policy design for sound ES provision.

Session format:



Standard session (presentations)

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 18 – Governance & Institutional aspects](#)

II. SESSION PROGRAM

Date of session: Friday, 14.10.2022

Time of session: 11:00 – 12:30 (1.5hr) + 13:30 – 15:30 (2hr)

Timetable speakers

Part I: Policy approaches, horizontal interplay and vertical interactions: Conceptual and methodological insights from policy analysis

Moderation: Carsten Mann & Lasse Loft

Time	First name	Surname	Organization	Title of presentation
11:00 – 11:10	Carsten	Mann	HNEE	Introduction to the session: Multi-level governance and the interplay of policies, institutions and actors for ES provision.
	Lasse	Loft	ZALF	
11:10 – 11:30	Cheng	Chen	Leibniz Centre for Agricultural Landscape Research (ZALF)	Incentive-based policies guiding toward climate-friendly use of peatlands in the EU
	Lasse	Loft		
	Bettina	Matzdorf		
11:30 – 11:50	M. Susana	Orta-Ortiz	University of Trento (DICAM)	Analyzing the integration of nature-based solutions in policy and planning documents in a cross-sectoral and multilevel governance structure
	Davide	Geneletti		
11:50 – 12:10	Anastasia	Konstantinova	Peoples Friendship University of Russia (RUDN University)	Prospects for Integrating Ecosystem Services Framework into Urban Planning, Policy Development and Decision-Making in Russia
	Anna	Filyushkina		
	Victor	Matasov		
	Diana	Dushkova		
	Kristina	Kerdivar		



Time	First name	Surname	Organization	Title of presentation
12:10 - 12:30	Evke Leena	Schulte- Guestenberg Karrasch	University of Oldenburg, Ecological Economics	Social network analysis of coastal governance - a chance for ecosystem- based coastal protection

Part II: Strategies for policy translation and implementation

Moderation: Lasse loft & Carsten Mann & Davide Geneletti

Time	First name	Surname	Organization	Title of presentation
13:30 - 13:50	Clémence	Dirac	Swiss Federal Office for the Environment, Forest Division	How to facilitate the translation of forest policy objectives from national to regional level? A case study on the concepts of forest ecosystem services and forest functions in Switzerland
13:50 - 14:10	Dieter Carmen Jacobs	Mortelmans Raisa Sander	INBO	Supporting policymaker discussions on policy-mix relevance for ecosystem service provision: lessons learnt from the INTERLACE project.
14:10 - 14:30	Nidhi	Nagabhatla	United Nations University (UNU CRIS), Bruges, Belgium; School of Geography Earth Science and Society, McMaster University, Hamilton, Canada	Can UN Decade on Ecosystem Restoration better the integration of Ecosystem Services into Environmental Governance?
14:30 - 15:00	Lasse Carsten Christian	Loft Mann Schleyer		Final debate and concluding remarks; closing of the session



III. ABSTRACTS

Abstracts are ordered based on the session program. The first author is the presenting author unless indicated otherwise.

1. Type of submission: Abstract

T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance

Incentive-based policies guiding toward climate-friendly use of peatlands in the EU

Presenting author: Cheng Chen

Other author(s): , Lasse Loft

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Peatlands are significant to global efforts to combat climate change. However, they have been a missing piece in the climate mitigation puzzle in the European Union (EU). Despite several policies and initiatives that have been or are currently being developed, there is a lack of understanding of which sectoral policies at different governance levels incentivize or disincentivize climate-friendly use of peatlands. In particular, we focus on voluntary economic incentives to provide alternative income supporting those affected in changing their management practices, which could be a promising policy instrument in supporting the sustainability transition of peatland management. Taking a policy coherence perspective, we chose three peatland-rich EU countries, Finland, Germany, and the Netherlands to investigate how policies from different governance levels, i.e. EU, member state and regional levels support and oppose existing and new incentive-based policies for climate-friendly use of peatlands. We conducted an online survey with 36 European stakeholder and semi-structured interviews with 35 experts from three countries. The results indicate a lack of policy coherence between agriculture, nature conservation, water management, forestry, energy and climate policies, when it comes to reducing emissions on peatlands. At the EU level, most prominently, the Common Agricultural Policy counteracts climate targets, as direct payments currently encourage the unsustainable management of peatlands. At the national and subnational levels, water quality in Finland, nature conservation in Germany and subsidence in the Netherlands were superior objectives. By analyzing the three countries individually and by contrasting them against each other, the study reveals the complexity and multi-sectoral nature of peatland policies and calls for coherence of policy frameworks



on attempts to reduce emissions considering policy objectives, policy instruments, and policy implementation. As Germany and Netherlands have recently made ambitious targets in reducing emissions from peatlands, our results might support countries to achieve more coherent policies.

Keywords: Climate mitigation, multi-level governance, policy coherence, payments for ecosystem services, carbon rich soil

2. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

Analyzing the integration of nature-based solutions in policy and planning documents in a cross-sectoral and multilevel governance structure

Presenting author: Susana Orta

Other author(s): Davide Geneletti,

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Policy and planning documents represent a crucial instrument for mainstreaming ecosystem services (ES) in cities. Specifically, coordinated integration of nature-based solutions (NbS) in planning actions can ensure their systematic implementation in urban areas, targeting improvement and synergies in ES supply at scales. Several studies have evaluated the uptake of ES in plans, while little efforts have been made to monitor this for NbS. This study addresses the NbS integration in planning tools of cross-sectoral and multilevel governance structures. Specifically, it assesses the extent to which several NbS types are proposed for different spatial locations by multiple actors and the actors' perception of nature's purposes. Eleven indicators were designed and assessed to summarize the findings of a qualitative content analysis of policy and planning documents. Specifically, the analysis, supported by the MAXQDA software, identified NbS proposals and extracted information on the types, sizes, scales, and functions of proposals, and the actors involved. The assessment was conducted for the case study of Gran Canaria, revising 24 documents developed at three government levels (i.e., regional, insular, and municipal) by 25 actors from multiple sectors, including ecological transition and climate change, territorial and urban planning, energy and water management, social equality, economic activities, and others. We identified 431



NbS proposals, which decrease as the governance level and the implementation scale increase. Most actors were involved as proponents, sometimes of the same NbS type. Despite this, few cross-sectoral and multilevel actors' coalitions were identified. The group of actors associated multiple functions with specific NbS types. However, few NbS proposals were conceived as multifunctional. The results also show some correlations between indicators. Based on them, we described and discussed several patterns of NbS integration in the planning tools of the case study. Finally, we suggested several planning opportunities for NbS mainstreaming.

Keywords: nature-based solutions, policy and planning documents, multilevel and cross-sectoral governance

3. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

How to facilitate the translation of forest policy objectives from national to regional level? A case study on the concepts of forest ecosystem services and forest functions in Switzerland

Presenting author: Clémence Dirac

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The concept of forest ecosystem services (FES) and forest functions (FF) are very similar in Switzerland, what generates a big confusion in the forest practices and policy frameworks. Both concepts are crucial for the implementation of national and cantonal forest policies and strategies, and both concepts are used in the Swiss forest practices. On one hand, the concept of FF is the basis of the Art. 77 of the Federal Constitution of the Swiss Confederation, and of the Art. 1 of the national law on forest (The Confederation shall ensure that the forests are able to fulfil their protective, commercial and public amenity functions). In the practice, FF is moreover the basis for multiple cantonal forest planning. On another hand, FES becomes more and more an essential concept in the national and cantonal strategies and policies, and in the cantonal planning too. However, it does never appear in any legal texts in Switzerland. In order to facilitate the translation of forest policy objectives concerning FF and FES from national to regional and local levels, it is the role of the Federal



Office for the Environment (FOEN) to bring some clarification on both concepts and its uses. To achieve this aim, the FOEN have launched discussions within the forest actors (federal and cantonal stakeholders as well as forest owners) on those points:

- Definitions of FF and FES for the Swiss context
- Link of both concepts to resilience and forest biodiversity
- List of FF and FES and relation between them
- Potential inclusion of the concept of FES in the national legal texts

Agreements could be found on the first three points, and the last point is still in discussion. The author will present the results of the discussions on which the different actors agreed.

Keywords: Forest functions, forest ecosystem services, clarifications, Switzerland, multi-level governance

4. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

Social network analysis of coastal governance – a chance for ecosystem-based coastal protection

Presenting author: Evke Schulte-Guestenberg

Other author(s): Leena Karrasch,

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Coastal management is challenged by impacts of climate change and decision-making processes still focus on technical and engineering solutions rather than on holistic, ecosystem-based long-term planning. The ecosystem services approach is often not considered in policies, as strict legal frameworks, established practices and entrenched structures limit cross-discipline dialogue. Our research question is, how horizontal and vertical integration of actors influence coastal governance and the consideration of ecosystem services into planning processes? Based on a digitalized Net-Map approach, we used a qualitative social network analysis to analyse such formal and informal collaboration, interests and influence, as well as synergies and conflicts of decision-makers in coastal



management. By analysing governance structures and social networks, the interplay of actors and relationships of horizontal and vertical policy integration can be understood. Furthermore, the approach contributes to successfully integrate and promote awareness to develop ecosystem-based coastal protection by including ecosystem services in coastal management. The network analysis indicates that informal cooperation on local and regional level is fundamental in coastal governance, the level on which ecosystem-based management will be implemented. Coastal protection is still locked in traditional thinking, even if the involvement of actors from other fields of action becomes more common. Integration of actors' interests and knowledge enables dialogue and ensures trust and fruitful cooperation. The interdependences in the social-ecological system require participation to raise awareness of ecosystem services for coastal protection and is crucial to develop joint knowledge and elaborate innovative adaptation strategies to be considered in planning and accepted by civil society.

Keywords: Social network analysis, ecosystem-based coastal protection, coastal governance, participation, Net-Map

5. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

Prospects for Integrating Ecosystem Services Framework into Urban Planning, Policy Development and Decision-Making in Russia

Presenting author: Anastasia Konstantinova

Other author(s): Anna Filyushkina, Victor Matasov

Affiliation: Peoples Friendship University of Russia (RUDN University),

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An application of ecosystem services (ES) framework in decision-making and urban planning is essential for sustainable urban development. ES can be implemented at different levels including strategic level (by providing support for plans and policies, initiating structural departmental changes), conceptual level (by raising stakeholders' awareness and reframing dialogues) and tactical level (by guiding specific decisions). The aim of the study was to understand the state of the art of ecosystem services inclusion in practice and decision-making at different scales of Russian system of urban development. For this purpose,



different methodologies were used (interviews with experts, document analyses and experts survey). First, based on document analyses and interviews of 30 experts from several cities of Russia (Moscow, Saint-Petersburg, Apatity, Rostov-on-Don, etc.) and professional areas (policymakers, urban planners, landscape engineers, scientists, active citizens, etc.) a situation with ES implementation was analyzed and key limitations and possibilities were revealed. On the second step these results were verified using the method of online survey of more than 50 experts. The obtained results show that ES of urban green spaces are not adequately reflected in practices and decision-making processes. They are not included in strategic urban planning as well as in landscape and urban development projects. At the same time, there are obvious challenges for scientific community to solve a large block of disagreements associated with the lack of a unified terminology, typology and methods. Experts understand the potential of applying ES valuation in practice and decision-making which include a necessity to develop methodological materials and different tools based on practical cases and taking into account the features of regions (climate, landscape features, etc.). Finally, a list of proposals on possible ways to include ES in the practical activities of the professional community and in decision-making processes was formed.

Keywords: ecosystem services, expert interviews, urban development, decision-making, blue-green infrastructure (BGI)

6. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

Supporting policymaker discussions on policy-mix relevance for ecosystem service provision: lessons learnt from the INTERLACE project.

Presenting author: Dieter Mortelmans

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Landscape and urban governance, and its effect on ecosystem service provision, is very often referred to as a complex process including many interacting policies and policy instruments. This is especially the case in urban settings but also for landscapes where land pressure is high, resulting in an increased number of policy objectives.



For researchers aiming to inform and impact decision making at city or landscape level this results into a challenging situation: how to render that complexity into a format that can easily be taken up by policymakers, and in so doing, increase positive impacts on the sustainable management of these landscapes and cities?

So far, many methods have mostly focused on either the evaluation of single policies or in qualitative assessments of policy mixes. While the former approach can provide insights on vertical policy coherence it lacks the potential to analyze horizontal coherence at landscape level. Since a lot of synergies and conflicts between policies are highly contextual and mostly become apparent at implementation, the omission of local horizontal coherence is problematic.

On the other hand, albeit it is certainly relevant from a scientific perspective, the latter approach is prone to result in lengthy reports that end up gathering dust on policymaker shelves. The results generated by both approaches also tend to quickly become redundant considering the dynamic drivers that shape ever evolving landscapes.

To address this challenge, we aimed to develop a quantitative, expert-based method to assess in a relatively quick manner the relevance of a policy instrument mix in regard to local challenges, with the specific aim to support rather than steer policymaker discussions. We will present a few results from the application of this method in 6 cities in the INTERLACE project, along with key lessons learnt.

Keywords: policy coherence, policy-mix, policy evaluation, science-policy interface

7. Type of submission: Abstract

[T. Thematic Working Group sessions: T18a – Policy and institutional analysis for ecosystem services provision – Conceptual, methodological and empirical inspirations of multi-level governance](#)

Can UN Decade on Ecosystem Restoration better the integration of Ecosystem Services into Environmental Governance?

Presenting author: Nidhi Nagabhatla

Other author(s): ,

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Post the Millennium Ecosystem Assessment (2005), the scholarship on ES progressed significantly, including the launch of the Ecosystem Services Partnership (2008) to create a dynamic network of regional and global experts and institutions. ES-focused theoretical and conceptual models, analyses, and assessments point to its integration of larger multi-level environmental governance agendas and provide a rich discourse for the scientific community. However, the policy lobby and the practitioner's efforts to translate this evolving set of knowledge into sector-specific policies and actions to support communities and stakeholders have remained limited. Post-2015, after the launch of Sustainable Development Goals (SDGs), the ES links were made explicitly, in SDG targets 14.7 (increasing economic benefits from the sustainable use of marine resources), or indirectly SDG 8.9 (policies to promote sustainable tourism), and in the sectoral context in SDG 6 (improve water quality and restore water landscapes/wetlands) and SDG3 with health and well-being (good quality of life) targets. Concurrently, the efforts, of The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) repositioned the ES focus via regional, global and thematic (land degradation, pollination, values of nature, etc..) assessments. Recently, the UN Decade on Ecosystem Restoration (2021-2030) is committing to preventing, halting, and reversing the degradation of ecosystems worldwide working together with states, resource managers, and practitioners. As an expert directly involved with the above-stated mandates, this synthesis will highlight three points: (a) gaps and challenges in ES transition from theory to practice (focus on the water sector); (b) IPBES ES-focused regional and global assessments -opportunities and challenges it presented in widening the sectoral ES discourse (focus on the global seaweed industry); (c) progress in the implementation of the UN Decade showcasing two key documents -capacity needs assessment report and the set of 10 principles underpinning the shared vision of ecosystem restoration

Keywords: Environmental Governance, Ecosystem Restoration , Ecosystem Services, Theory, Practice