2019 Mexico Conference on Earth System Governance

Urgent Transformations and Earth System Governance: Towards Sustainability and Justice

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https://www.earthsystemgovernance.org/mexico2019/news/

Contribution to Conference Stream:

***Adaptiveness and Reflexivity**: We invite papers that address how societies can navigate change towards global sustainability in an adaptive and reflexive way and what are the opportunities, barriers and trade-offs. Core questions include: How can adaptiveness and reflexivity as qualities of earth system governance be assessed and compared? What kind of governance attributes (e.g. polycentricity or centralization, flexibility or stability) are best suited to cultivating adaptiveness and reflexivity? Which factors enhance or hinder adaptiveness and reflexivity in diverse cultural and economic contexts? Do socio-environmental conflicts and social movements favor or halt adaptiveness and reflexivity?*

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Reflection on responsible innovation in Earth System Governance

Advocates of the Agenda 2030, and of sustainability-oriented Science, Technology and Innovation (STI) more broadly, typically view science–society interactions and societal co-production of knowledge as preconditions for responsible research and innovation. However, the complexities we face in practice trigger resistance, reinforce institutional and political obstacles, and weaken the success of development interventions. Recent progress in epistemological clarification of sustainability science makes it possible to better align research and innovation (studies) with the paradigm of sustainable development. An emancipatory understanding of sustainability allocates each individual an equitable role as an agent of change in a joint future-forming process. As a result, equity-related factors define the quality of science–society interaction. These include: the balance of power and deliberative capacity of actors involved; openness to diverging values, interests, culture, worldviews, or knowledge systems; the growth of shared understanding, working culture, and mutual trust; the principles of reflexivity, learning, and adaptation in a collaborative setting; and meaningful, consequential involvement of all in decision-making and process navigation.

Although promising ways of increasing the quality of science–society interaction are often incorporated in the planning, transdisciplinary practice usually continues to be contested by partners within and beyond particular projects. We argue that to understand, evaluate, and adapt the contribution of research and innovation to Earth System Governance, it is helpful to examine the generally conflictive systems of reference that are binding for researchers and practitioners involved. To underpin this, we focus conceptually on three major innovation paradigms usually combined in transdisciplinary research and innovation portfolios: In a first innovation paradigm, science is the system of reference – with scientific analysis expected to bring in the “right” solution for policy and decision-making. The second – now very popular – innovation paradigm centres on science–society interaction in multi-stakeholder processes and platforms: yet, frequently representing “open spaces” of negotiation and exchange, these suffer most from dynamics of unequal negotiating power and

conflicting systems of reference. In this paper we examine how sustainable development as the overarching reference system for Earth system governance might generate a third innovation paradigm suited to foster equity-based, reflexive, responsible and inclusive knowledge production and innovation. More specifically, we draw on evidence from transdisciplinary projects in a North-South context. Reflexive, adaptive project navigation successfully allows combining disciplinary, inter- and transdisciplinary steps and elements on behalf of shared goals, and is suited to reduce tension and resistance in the joint project navigation towards sustainable development.