ESS lecture Series on Sustainability Related Institutional Analysis

September 20, 2016; 09-00-10:00 & 13:00 – 14:00; Room D24

1. Jannika Mattes, U of Oldenburg (took place August 23)

Sustainability-related Institutional Analysis - An institutional perspective on energy transition

This presentation looks at energy transitions as social processes. I will suggest to combine insights from different institutional schools and combine them into the concept of regional transition fields. This perspective allows to explain how globally and nationally embedded actors and institutions from different social fields shape regional transition processes through processes of negotiating, norming and learning.

2. Paula Kivimaa, SPRU, U of Sussex 09:00 – 09:30; D24

Changing governance for sustainability transitions: policy mixes, governance experiments and intermediary actors

Sustainability transitions are desired long term trajectories in terms of mitigating or reducing the impacts of climate change. Much research has explored this topic from a range of perspectives. This presentation explores a research agenda for changing governance for sustainability transitions. Focus will be placed on three emerging fields of research at the interface of transition and policy/governance studies, namely policy mixes, governance experiments and intermediary actors. Intermediary actors and experiments in particular represent alternatives or complements to more traditional forms of governance, and can be crucial to the success of transition efforts and open avenues for new governance arrangements. For example, intermediary actors can operate at different levels and scales – from individual projects to the system level – and phases of transitions in different ways, forming of a web of intermediation for transition. Similarly experiments can address different forms in and scales of transition. The presentation will show early research results on intermediaries in UK low energy housing transitions and explore to what extent the findings might apply in other transition contexts.

3. Jampel Dell'Angelo U of Virginia and U of Maryland 09:30-10:00; D24

Cooperation and Conflict Over Water Resources: Local and Global Dynamics.

People compete over water resources, and this competition leads to conflict. However, people also cooperate and engage in collective action to allocate, distribute and share water. The complex dialectic of competition and cooperation over water resources happens on multiple scales, is produced by interdependent social and environmental dynamics, and has outcomes of high social and ecological importance. Understanding these processes requires multi-method, interdisciplinary approaches that combine social science and hydrological expertise. In this talk I will present research on local-scale cooperation and global competition over water resources.

First, I will discuss recent water governance reforms in Kenya affecting river basin management systems. With a mixed team of social scientists and hydrologists we have investigated how 25 community water projects in 5 river basins negotiate and manage scarce water resources coping with climate change and other stressors such as demographic pressure (a short documentary describing this research is available at videos4water.org). I will highlight the dialectic relationship between institutional transformation and increased cooperation and socio-environmental outcomes.

Second, I will present research on global competition over water and how the contemporary global land rush (popularized as land grabbing) has profound hydrological implications. I present a framework developed in collaboration with hydrologists to define the concept of 'water grabbing'. We invoke hydrological theories of "green" and "blue" water flows to stress the extent to which water appropriations are inherently coupled to land acquisitions and adopt a formal definition of water grabbing based both on biophysical conditions (water scarcity) and ethical implications (human right to food). We use this framework to provide a global assessment of the likelihood that large-scale land acquisitions entail blue water grabbing.

Finally, I will discuss developing theory on how global and local dynamics of competition and cooperation interact and how this opens a very exciting research horizon for socio-environmental institutional analysis.

4. Christian Binz, Circle, Lund U and Harvard U 13:00 – 13:30; D24

Overcoming Institutional Barriers for New Path Creation in Urban Water Management – A Research Agenda

Urban water and wastewater management (UWM) stands at an important crossroads. Radically new technological and institutional arrangements need to be developed if one wants to satisfy the water service needs of quickly growing urban populations. Whereas innovative water saving technologies like potable water reuse, on-site recycling, no-mix toilets or waterless washing machines are increasingly feasible, their practical implementation often faces strong resistance from end users, politicians and the business community. Key barriers for new paths do not stem from a technological, but from an institutional level: Current 'rules of the game' in the water sector, like established laws, dominant beliefs, or cultural traditions, hinder the quick uptake of potentially more sustainable solutions. Yet, to date, our understanding of these institutional barriers for transformation is still rather limited.

In this talk I will outline an interdisciplinary research agenda that aims at identifying key barriers for institutional change in UWM and how they might be overcome. Drawing on recent scholarship in human geography, sociology and sustainability science I propose to improve our understanding in three interrelated domains: 1) New sustainable path creation in Asian megacities, 2) Resistance to change in the global water regime, 3) Transformation of social-ecological systems towards higher sustainability. I will argue that combining Eawag's unique mix of competencies with my current research projects at Harvard, UC Berkeley, Lund University and various Chinese universities could lead to a highly innovative research program in sustainability-related institutional analysis. I will in particular outline how a novel combination of qualitative research designs and quantitative social network analysis could be used to analyze how, why and where new paths in UWM succeed or fail.

5. Johann Dupuis, IDHEAP University of Lausanne 13:30-14:00; D24

The value and prospect of sustainability-related institutional analysis for the environmental social sciences: explaining social-ecological interactions and diagnosing policy failures

This talk addresses the question why an analytical focus on institutions is essential to the study of social-ecological systems. Institutions can be understood as constraints that structure political, economic and social interaction (North, 1991). They represent the rules of the game with regards to how natural resources are managed in a given setting. Several analytical frameworks have been proposed in order to identify the features of institutions that contribute to robust (Ostrom, 2005) or resilient (Lebel et al., 2006) social-ecological systems. However tempting it may be, I argue that institutions can hardly be reduced to a set of causal variables in order to predict the outcomes of a given system. This is, first, because institutional environments have become extremely fragmented, with a complex interplay of mutually competing rules and norms, which limits the possibility to build deterministic models of their effects (Young, 2002). Second, recent experimental research points out that the dynamic process by which actors appropriate or even voluntarily enact institutions may be significantly more explicative than the nature of these institutions (DeCaro, Janssen, & Lee, 2015). In order to comprehend how a system may evolve towards sustainability, the causal processes operating between actors and complex of rules must be scrutinized. I demonstrate the explanatory power of this actor-centered institutionalism by presenting research findings about the impacts of the introduction of contaminated sites regulation for water management in Switzerland, using a case study of the Bonfol (JU) chemical waste disposal site (Dupuis & Knoepfel, 2015). From there, I conclude on the potential, for the environmental social sciences, of institutional analysis combined with qualitative, comparative and experimental methods. Three domains of applications appear most promising: (1) the testing and improvement of core theoretical ideas on adaptive management and system transformation; (2) the comparative evaluation of the effectiveness of policy instruments implementation in various contexts and institutional settings; (3) applied research and consulting work to test or help designing innovative institutional solutions to long-lasting environmental problems