EcoAdapt: Adaptation to climate change for local development in model forests of Argentina, Bolivia and Chile: trade-offs for supporting robust local processes at the science-society interface

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Abstract

Session: Trade-offs and synergies: what do we learn from community-based management of environmental challenges?
Climate change is expected to have a large impact in Latin America, where a diversity of economic development and civil society processes show a high dependency on natural resources. While the focus has been more on mitigation because of clear incentives, adaptation to climate change is gaining ground through a range of initiatives going from ad-hoc changes in practices, to adaptation plans done by consulting firms and technicians with little inputs from civil society. Yet a focus on adaptation is a great opportunity for building resilient societies.

We explore how trade-offs and synergies have taken shape in an action-research project in which research and civil society organizations team to address water security in a context of multiple uncertainties. EcoAdapt’s aim is to enhance the collective capacity to adapt to climate change in marginal territories of Argentina, Bolivia and Chile. This is done through the co-design of an adaptation plan, combining empirical and scientific knowledge, preventing and mitigating conflicts, and promoting collective action at various governance levels.
Yet trade-offs and synergies emerge in the co-design process, both at the project level and at the beneficiaries level.

While EcoAdapt promotes a critical stance in knowledge sharing, we are in fact adding an uncertainty to existing ones. On one hand, this critical stance adds uncertainty on the value of knowledge and its legitimacy, which challenges the accepted power structure among projects’ partners. On the other hand it pushes us to work with agents of change and experiment with innovative participatory approaches, such as forum theatre or hybrid forums, which creates and maintains new synergies and favors a balance of power. These approaches help to build trust, to make trade-offs more explicit, and lead to more robust and sustainable solutions. Learning also challenges evaluation of the project’s impact as trade-offs, synergies and markers of change evolve as key players engage in the process and make strategic choices individually and collectively across scales.

Trade-offs also take place in the co-implementation of research activities, as it requires involving non-scientists (with different agendas and motivations) in the design of methods, data collection and analysis. For example participant observation had to be adapted, deviating from the best practices in order to be pragmatic, inclusive and change generating.

At the beneficiaries level we can highlight some important trade-offs, e.g. in the Bolivia site: the fair vs the realistic; fixing current infrastructure vs mitigation measures; co-management complexity vs simplicity/genericity. In all cases equity or ownership and empowerment are in play and call for proper mediation, as evidenced in a conflict resolution case about water rights in Chile’s site.

Progress has also been made about scenario planning, in which we combine traditional envisioning and modeling with structured decision making in order to address pressing problems while acknowledging differences in uncertainties, worldview and values.
We conclude by an analysis how trade-offs and synergies in community-based management contribute to water security and resilient societies.

Keywords: adaptation, climate change, civil society, trade, offs, synergies, community, model forest, Latin America, Argentina, Bolivia, Chile, water, governance