Bern Future Earth meeting: Core Projects and Science and Engagement Committees 27-29 June 2016



PECS research is explicitly transdisciplinary, and aims to break down barriers that have previously impeded understanding of social-ecological transformations. One of the key features of PECS research is the focus on interdependent and linked systems of people and nature that are nested across scales (social-ecological systems). This reflects that people are part of ecosystems and shape them, from local to global scales and are at the same time fundamentally dependent on the capacity of these systems to provide services for human wellbeing and societal development. The international program office of PECS is hosted and funded by the Stockholm Resilience Centre (SRC) - a leading transdisciplinary collaborative research centre in the area of coupled social-ecological systems, regime shifts and stewardship of ecosystem services.

The principal approach of PECS research is the in-depth understanding of place-based, long-term social-ecological case studies, using a broadly similar set of conceptual frameworks and tools, leading to comparisons in order to reveal general principles for sustainably managing these systems. 21 transdisciplinary projects have officially been endorsed as *PECS projects*, which together cover 42 regional social-ecological case-studies in 25 countries<sup>1</sup>. Research across these case-studies is adaptive and transdisciplinary and combines different knowledge systems and perspectives. This approach makes PECS highly aligned with the goal of Future Earth to support and foster enthusiasm and skills to work across disciplines in order to promote a holistic approach towards sustainability.

PECS also facilitates a set of dynamic, interdisciplinary *PECS working groups*<sup>2</sup> that focus on different cross-cutting topics that require international collaboration. For example, the PECS working group "Collaborative Governance and Management" investigates how collaborative practices are implemented and work (or not) toward ecosystem stewardship and improved human well-being at multiple locations (at a minimum using case-studies in South Africa, Australia, United States, Sweden and Canada) around the globe. Another PECS working group includes the Future Earth FTI "Bright Spots: Seeds of a Good Anthropocene".

PECS also sponsors broader international workshops that will contribute to a wide range of research on social—ecological systems. For example, in January 2015 a PECS workshop brought together researchers (primarily from PECS projects, but also from other Future Earth projects) to synthesize work on ecosystem service trade-offs and synergies (i.e. ecosystem service bundles) and their key social, ecological and geographic drivers.

The first PECS conference (2015 in Stellenbosch, South Africa) was attended by 232 participants, with an explicit focus of having a mix of scientists, policy makers and practitioners. In conjunction to the conference PECS also hosted an invitation only science—

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<sup>&</sup>lt;sup>1</sup> For more details on these projects and case-studies – www.pecs-science.org/research/projects

<sup>&</sup>lt;sup>2</sup> For more details on these working groups – www.pecs-science.org/research/workinggroups

<sup>&</sup>lt;sup>3</sup> http://pecs-science.org/research/workinggroups/collaborativegovernanceandmanagement

<sup>&</sup>lt;sup>4</sup> http://pecs-science.org/research/workinggroups/seedsofagoodanthropocene

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policy dialogue (with 56 scientists, practitioners, NGOs, activists, artists, government officials) designed to focus on the theme "Opportunities for creating a Good Anthropocene in Southern Africa". The model is to host biennial PECS conferences, and science-policy dialogues, that are co-designed with regional stakeholders. The next PECS conference will take place in Oaxaca, Mexico in October 8-10 2017.

2015 also saw the publication of a PECS Special Issue in Ecology and Society<sup>5</sup>. The Special Issue gives an overview of work being carried out in the different PECS case-studies and working groups, focusing on the key insights generated in studying social-ecological systems.

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<sup>&</sup>lt;sup>5</sup> http://www.ecologyandsociety.org/issues/view.php?sf=106