Ecosystem change and society in southern and western Africa

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Abstract

This two hour sessions includes two different parts:
- A specific session of the Southern African Program on Ecosystems Change and Society (SAPECS)
- A second part presenting socio-ecosystem changes and resilience in Sub-Sahara Africa through different disciplinary lenses.

Part 1: Supporting social-ecological stewardship and finding pathways out of poverty: The Southern African Program on Ecosystem Change and Society (SAPECS) – Coordination Dr Oonsie Biggs

A defining challenge of the 21st century is to find new pathways for large-scale societal transformation out of poverty that significantly reduce the impact of human activities on the Earth system. This challenge is particularly acute in southern Africa, which contains some of the world’s most biodiverse and least impacted ecosystems, but where many people still live below the poverty line. The Southern African Program on Ecosystem Change and Society (SAPECS) is a transdisciplinary research program that aims to contribute to this challenge by better understanding:

- How changes in social-ecological systems (SES) and ecosystem services influence human well-being and equity, with an emphasis on poverty and inequality
- How the dynamics of SES in southern African are shaped by structures and processes at interconnected local, regional and global scales, as well as over a range of timescales
- How governance and management institutions and practices affect SES, including the capacity for learning and transformation
- Potential traps and transformations in the structure and dynamics of SES, and the consequences of different development trajectories

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• How knowledge can be mainstreamed into policy and practice to achieve tangible impact and effect change in SES governance

• How transdisciplinary, collaborative approaches can be best applied, including transdisciplinary graduate training.

SAPECS is linked to the international Program on Ecosystem Change and Society (PECS), a 10-year research initiative within the ICSU global change programs, and consists of a network of about 30 researchers from within the southern African region and abroad actively engaged in researching SES in a range of case studies and projects at various scales in southern Africa. In addition to individual projects, SAPECS aims to facilitate cross-cutting comparative studies and syntheses in relation to the six core research themes above.

This session will be structured around an integrated panel presentation (35min) that briefly introduces SAPECS and showcases a selection of case studies and exciting emerging findings from the program in relation to the six themes, followed by a dialog (25min) reflecting on the cases and emerging lessons in conducting large, collaborative transdisciplinary research programs.

DIALOGUE (20 min)

• Direct follow-up questions about the material presented

• We pose two questions to the audience:
  i. What can SAPECS particularly contribute in relation to better understanding ecosystem change and society, and the potential for transformational development in a global context?

  ii. What insights, experiences or reflections do people have in relation to running transdisciplinary research networks?

Part 2: Socio-ecosystem changes and resilience in Sub-Sahara Africa through different disciplinary lenses. Coordination Dr Raphaëlle Ducrot and Dr William’s Daré

This second part of the session aims to complete the first session by presenting analysis of socio-ecosystem changes and resilience in sub-sahara Africa with a larger perspective.

Confronting and discussing experiences in the context of African challenges is expecting to clarify the practical significance (limits and potentiality) of socio-ecosystem development in a resilience lens. Analysis of socio-ecosystem adaptation often highlights the various types of social, political, economic, cultural or environmental processes difficult to disentangle which shape the conditions for changes. But while the rich ecosystems of Sub-Sahara Africa still sustains a large part of rural livelihoods, technological changes and rapid urbanisation, the development of informal economy or wealth accumulation of elites in a context of political fragmentation presents new opportunities and challenges to transform out of poverty.

This session will be structured around a rapid presentation of five contribution [30 mn] followed by a 30 mn discussion. It is expected that the discussion will draw from the presentations of the first and second part.

The dialogue will in particular explore:

- The importance of (historical, political, environmental) context in the socio-ecological transformation and resilience: is there South African, West African or African specificities?

- The desirable or undesirable dimensions of resilience in the context of Africa: What are the drivers of changes and the drivers of lock-in situation?
- Going beyond African poverty: To what extent an analysis of socio-ecosystem changes at a territorial level make sense in Africa? How to take into account the dynamics interactions with rapidly developing urban area, the informal economy and multi-local livelihoods?

**Keywords:** Adaptive capacity, Adaptive (co) – management, Conservation, Development, Poverty, Resilience, Social, ecological systems, Stewardship, Trade, off, Trajectories, Trap, Transformation