Session XI - Exploring methods for adaptation to climate change

Rapporteur: Ilona Mettiäinen

Arctic Centre, University of Lapland, Finland

Presentations in the session:

- Kristín Þórarinsdóttir: Can action research act as a vehicle in climate change adaptation?
- Olaf Foss: Methodological challenges in multidisciplinary climate change research experiences from ESPON Climate
- Erik Gløersen: Using foresight to trigger entrepreneurship and growth in West Nordic rural communities

The NRF Open Assembly 2013 placed methods for assessing socio-economic impacts and for planning adaptation measures to climate change in regions and local communities in the Arctic as one of its three key themes. New methods for planning and multidisciplinary research are required for managing with the challenges caused by the particularly strong impacts that climate change will have on Arctic societies and nature.

Kristín Þórarinsdóttir's presentation focused on (participatory) action research as a method. Many features of action research, as it integrates the processes of research and change, fit well to climate change adaptation when adaptation is seen as a learning and empowerment process. An example on climate change adaptation project in Africa was presented.

Olaf Foss's presentation discussed the challenges of multidisciplinary in climate change adaptation research. ESPON Climate is a European-wide vulnerability assessment in which regional typologies of climate change exposure, sensitivity, impact and vulnerability are identified for enabling regionally tailored adaptation options. The research project has found out for instance that the expected impacts of climate change are mostly positive in the North Europe and in the South Europe mostly negative.

Foss regards multidisciplinary necessary in climate research. However, in practice multidisciplinary can also be problematic. A natural science oriented framework may for

instance exclude some useful methodologies of social sciences. Foss discussed also the differences in natural and social scientific prediction. The natural scientific data and projections on climate change extend until 2100, but social predictions 100 years ahead may be "fun to make but not make sense". Hence the usefulness of foresight on a centennial scale was questioned. However, useful foresight knowledge on shorter time span such as 30-40 years is available and scenarios were seen as potential ways for elucidating how the future may unfold.

Erik Gløersen discussed foresight methods based on experiences from foresight workshops organized in West-Nordic rural communities. The workshops were organized in order to identify the communities' development challenges and entrepreneurial opportunities. The aim was to test foresight methods as a tool for policy-making on a multi-level perspective in West Norden by successive workshops at local, national and transnational levels.

Some methodological success factors identified for the foresight workshops apply also to other collaborative planning and research methods. For instance a relationship of trust had to be created with the villagers before the workshops and different collaboration methods were applied depending on the profiles of the participants. For discussion on multilevel governance, it was noted that" local level" means different things in different places: villages in Greenland, islands in Faroe Islands and municipalities in Iceland.

Gløersen concluded that the foresight workshops succeeded in creating an arena for open dialogue and consensus-building on the local communities' opportunities and challenges. Systematizing this approach could improve the capacity of local communities to face future challenges related to climate change or other issues. The current lack of persons with expertise in the facilitation of foresight processes could be overcome by organizing courses and other initiatives.

The core messages to take home from this session include the necessity of multidisciplinary research in climate change issues and the need to consider how to achieve "optimal" multidisciplinary as well as the need to find and develop new methods and to ensure the availability of expertise in them.