Geophysical Research Abstracts
Vol. 14, EGU2012-12581, 2012
EGU General Assembly 2012

Climate change on arctic environment, ecosystem services and society (CLICHE)

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The predicted climate warming has raised many questions and concerns about its impacts on the environment and society. As a respond to the need of holistic studies comprising both of these areas, The Academy of Finland launched The Finnish Research Programme on Climate Change (FICCA 2011–2014) in spring 2010 with the main aim to focus on the interaction between the environment and society. Ultimately 11 national consortium projects were funded (total budget 12 million EUR). Here we shortly present the main objectives of the largest consortium project "Climate change on arctic environment, ecosystem services and society" (CLICHE).

The CLICHE consortium comprises eight interrelated work packages (treeline, diversity, peatlands, snow, lakes, fish, tourism, and traditional livelihoods), each led by a prominent research group and a team leader. The research consortium has three main overall objectives:

1) Investigate, map and model the past, present and future climate change-induced changes in central ecosystems of the European Arctic with unprecedented precision

2) Deepen our understanding of the basic principles of ecosystem and social resilience and dynamics; identify key taxa, structures or processes that clearly indicate impending or realised global change through their loss, occurrence or behaviour, using analogues from the past (e.g. Holocene Thermal Maximum, Medieval Warm Period), experiments, observations and models

3) Develop adaptation and mitigation strategies to minimize the adverse effects of climate change on local communities, traditional livelihoods, fisheries, and tourism industry, and promote sustainable development of local community structures and enhance the quality of life of local human populations.

As the project has started only recently no final results are available yet. However, the fieldwork as well as the co-operation between the research teams has thus far been very successful. Thus, the expectations for the final outcome of the project are very high.

For more information, please visit http://www.helsinki.fi/bioscience/ecru/projects/clicheindex.htm.