

Workshop report "Adaptation options in the Barents – Writers workshop"

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Summary of workshop results

The chapter that was developed during the workshop analyzes the processes that shape adaptation options (for "stakeholders" in the Barents Region) in the light of multiple stressors and effects of cumulative and interacting changes, including environmental and climatic, societal, institutions and governance, political and economic. During the workshop, the participants discussed the following topics:

- 1) the literature about previous adaptation responses in the region and the impacts, perturbations, stresses or challenges that were responded to;
- 2) information from the other AACA chapters;
- 3) how to understand and define "adaptation options"
- 4) how to understand and define "interacting drivers of change".

Goal of the chapter

The aim and scope of the chapter is twofold: It will illustrate the processes that shape adaptation in the Barents Region in the light of multiple stressors and effects of cumulative and interacting changes, including environmental and climatic, societal, institutions and governance, political and economic. And through the analysis of a multiplicity of resources, including the previous chapters of this report, the chapter will highlight the conditions that require adaptation, current and future, and assess adaptation actions and the adaptation options. The analyses and assessments are based on data, results, reports and other input from the four different countries and communities composing the Barents Region. The analysis include a focus on barriers, limits, actions, opportunities and motivations that have a role in adaptation. New and unprecedented changes both in climate and in socio-economic conditions are likely to require a new way of thinking about adaptation.

About the workshop

Workshop goal

The core of the workshop was to discuss a preliminary assessment of literature about climate change impacts, vulnerabilities and adaptation in the Barents region, and use this in a chapter regarding adaptation options in the Arctic Monitoring and Assessment Programme's assessment on Adaptation Actions for a Changing Arctic - Part C (AACA-C). The participants were also trying to develop and apply the concepts of *adaptation options* and *interactive drivers of change*. This slightly differed from the original scope of the workshop, that focused on discussing stakeholder feedback on the assesment. This feedback will be assured through consultation on the completed manuscript.

The result of the workshop will be submitted to the AACA secretariat the 1st of March 2016. The AACA-C report will be published by the beginning of 2017.

Who were the participants?

The workshop participants were scholars that are contributing to the chapter. They are all experts on climate change adaptation, from academic institutions in Norway, Sweden, Finland and Russia.

What is AACA-C?

In 2011 the Arctic Council directed the Senior Arctic Officials “to review the need for an integrated assessment of multiple drivers of Arctic change as a tool for Indigenous Peoples, Arctic residents, governments and industry to prepare for the future”. This resulted in the project “Adaptation Actions for a Changing Arctic” (AACA).

The overall objective of the AACA is to enable more informed, timely and responsive policy and decision making in a rapidly changing Arctic; the project consists of three separate activities. The AACA-A project led by the Arctic Council’s Sustainable Development Working Group (SDWG) and is a compilation of assessments and reports prepared by Arctic Council working groups over the past ten year with findings and recommendations that could inform adaptation options and actions.

AACA-B was led by Canada and Russia and focuses on the adaptation activities that are being implemented by Arctic Council member states on a national, sub-national, regional and local level. Parts A and B were finalized in 2013.

In May 2013 the Arctic Council decided to continue its work on the AACA initiative and requested the AMAP Working Group to “produce information to assist local decision-makers and stakeholders in three pilot regions in developing adaptation tools and strategies to better deal with climate change and other pertinent environmental stressors”. This has resulted in the AACA-C project which will deliver its overall integrated report to the 2017 Arctic Council Ministerial Meeting (from the AACA website).

Day 1

Summary of discussion of adaptation options

How to define the concept of adaptation options? The concept was coined in the IPCC fifth assessment report (AR5). The range of adaptation options is partly based on analysis and synthesis of adaptation that has taken place, what conditions will require future adaptation and what the possibilities are, given barriers, limits and opportunities. Future climate scenarios can be used to project future adaptation needs and the chapter will work closely with the chapters that are developing climate scenarios. In order for solid adaptation options and actions to be developed we need detailed descriptions of impacts, responses, and relationships between interacting drivers (from the other chapters and from analyses within the chapter).

The chapter will utilize information from the other chapters in the AACAC and based on this information will assess the conditions that require adaptation, current and in the future, and assess the adaptation options and actions in the light of existing knowledge about adaptation and adaptive capacity in the region.

Day 2

Summary of discussions on interacting drivers of change

That climate change is not impacting society in a vacuum is well-established in the literature, and numerous frameworks seek to adopt a "multiple stressor" perspective. In recent years, adaptation research in the Barents region has focused on the interactions between and cumulative effects of changing climatic, economic, social and environmental conditions, and between natural resource users. In addition, the research focus has been on the impact and responses to change in the various sectors. In this chapter we seek to assess and review this literature on climate and environmental change impacts and adaptations in order to identify examples of such interactions and cumulative and cascading effects. An example, a figure based on this assessment, is shown in figure 1, which was developed in accordance with the workshop.

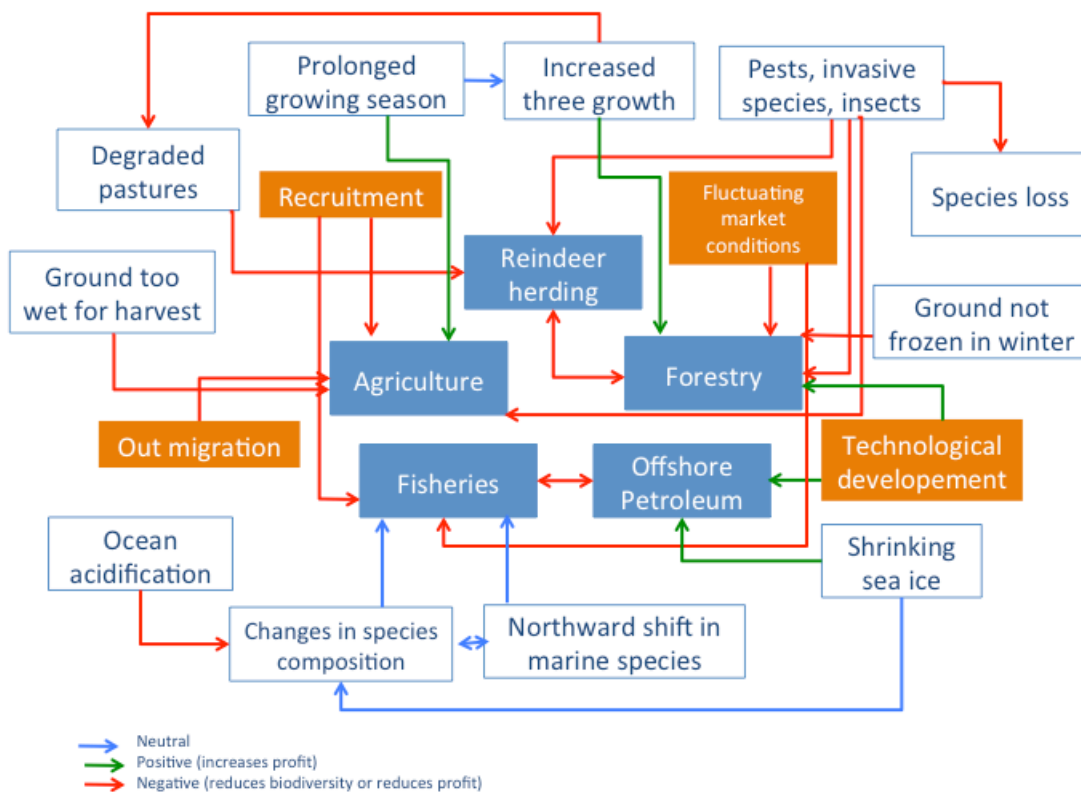


Figure 1: Interacting drivers of change in key industries in the Barents region.