



Indigenous Cultures – Past to Future: In the context of climate change

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Three points



- Current societal and climatic changes pose new and different challenges to highly adaptive indigenous peoples in the Arctic
- There are significant parallels between indigenous and non-indigenous communities in the Arctic
- Resilience and strength for dealing with change may be built through integration of different types of knowledge

Cultures and tradition – blurry terms

Cultures are dynamic and changing

Tradition is seen as fixed in time = PARADOX

“Traditional” connotes a static situation, highly political when used as an excluding device (not traditional enough)

Legitimacy of traditional cultures

Who decides when a culture is no longer traditional, and on the basis of which criteria



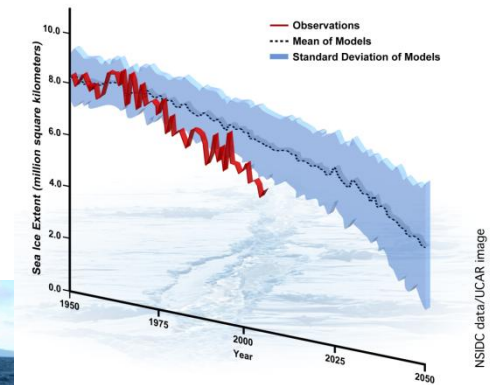
Climate change and indigenous cultures

- Indigenous cultures are participating in a changing world – globalisation a key
- Climate change is one driver of change – and combine with other changing conditions to shape vulnerability of indigenous peoples
- There are direct and indirect consequences of climate change
- Consequences of climate change varies greatly between indigenous peoples
- Adaptive capacity and vulnerability to change varies

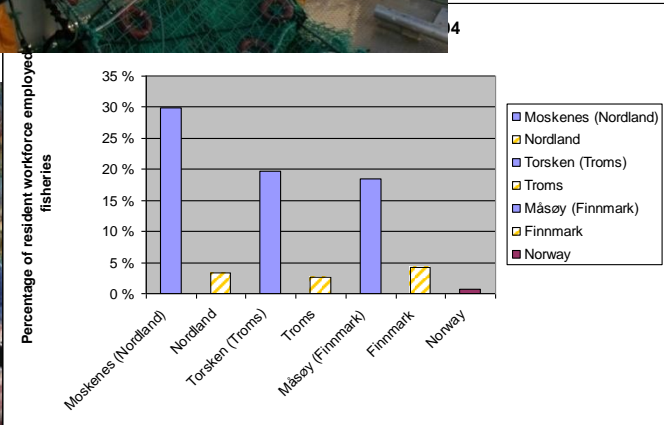
Adaptation to climate change requires knowledge integration

- Local/traditional knowledge
- Consultations, discussions, interviews
- Statistics, historical, reports
- Relevant climate data
- Downscaled climate scenarios
- Natural resource data/biology
- Sea level rise, storm surge,
- Polar lows, extreme events
- Etc.....

Arctic September Sea Ice Extent: Observations and Model Runs



Employment in fisheries



Changing sea ice and hunting

- Changing sea ice conditions: strength and properties
- Ice dependent species affected
- Travel conditions, unpredictability, current knowledge of species and environment not as valid, weakening social fabric, diet, well-being, transfer of knowledge



Autumnal moth in Finnmark

- -35° C for 3 days moth dies
– less likely with warmer climate
- Moth kills birch trees and berries – large areas destroyed – fertilize ground beneath
- Increases access to grass for sheep and reindeer – for a limited time
- Decreases habitat for ptarmigan (and moose?)
- Snare material loose flexibility



Reindeer slaughter Murmansk - threshold -18°C

- Warmer autumn - delay slaughter
- Minimum -18°C needed to transport reindeer on frozen ground and to preserve meat
- Postponed slaughter – lower weight – less income



Challenges of current and future climate change

The ways and what of knowing: changes beyond current adaptation and understanding of the environment: safety, social fabric, well-being, transfer of knowledge to younger generation



The wheres and whats of renewable resources:

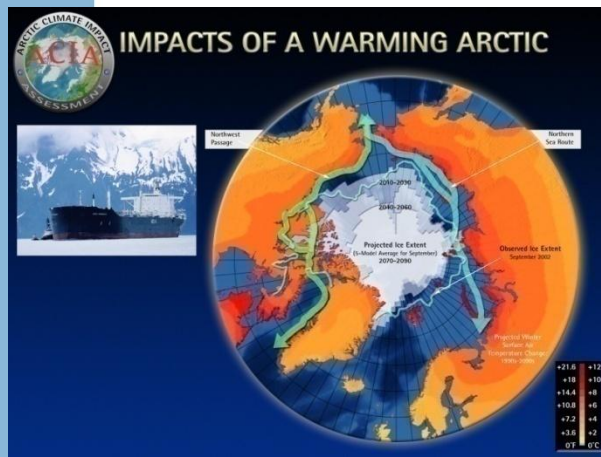
access, changes in resource types , abundance and distribution of species may require new technology, management and activities

Challenges of current and future climate change for indigenous peoples

The wheres and whats beyond community:

rights and access to new resources, access to shipping routes, environmental safety, indigenous peoples role on int'l arena

Increase adaptive capacity: to maintain livelihoods, to preserve cultural values, to reduce vulnerability

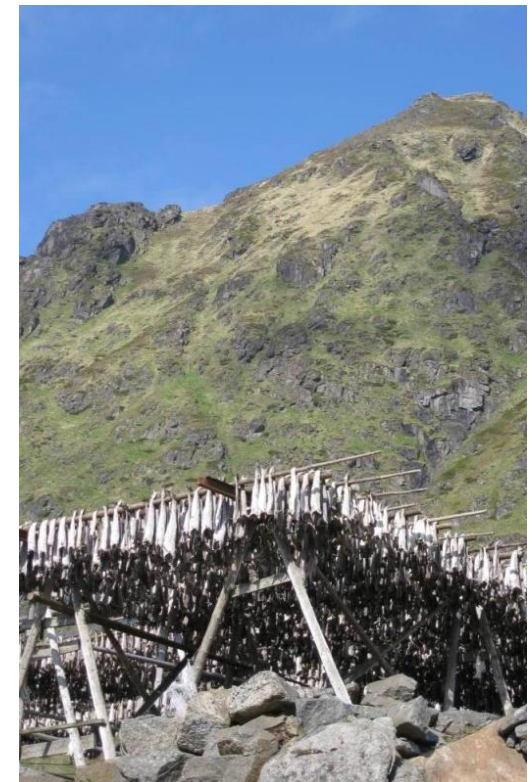


Strengthening resilience in indigenous cultures – from a scientist's perspective

- Setting the research agenda: ensure relevance, will build capacity
- Involvement in research and dissemination of results
 - To increase knowledge and understanding within indigenous cultures
 - Questions of how to deal with oral and context specific knowledge
- Expand adaptive capacity through communication and transfer of knowledge between cultures – indigenous and non-indigenous and scientists

Parallels with non-indigenous societies

- Natural resource-dependent communities
- Closely connected to the local environment
- Extensive local knowledge
- Center-periphery identification
- Disconnect with national management – co-management relevant
- Transferrable knowledge about adaptation to climate change



To conclude..... knowledge is underpinning a successful future

- Climate change in combination with societal changes pose new and different challenges to highly adaptive indigenous cultures, with respect to knowledge, access, rights and capacity
- Indigenous cultures and non-indigenous communities in the Arctic face many of the same challenges. It is possible to exchange knowledge and generalise while keeping the particularities that distinguish and honor the cultural differences

Resilience increased by combining different forms of knowledge

- Interdependency of knowledge systems: scientists increasingly seek indigenous input and indigenous peoples combine their own knowledge with scientific input to better face new challenges in the context of climate change
- Increased collaboration and integration of knowledges the key to handle current and future changes



Thank you for your attention!