



## **POLICY OPTIONS FOR ARCTIC ENVIRONMENTAL GOVERNANCE**

**Prepared by the Indigenous Peoples Working Group**

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### **Background**

The Arctic marine environment and the harvesting of renewable resources by indigenous peoples are being affected by global climate change. Climate change research and scenarios for the future suggest that climate change will have significant impacts on marine and terrestrial animal populations, affecting population size, structure, reproduction rates and migration routes. Arctic residents, particularly indigenous peoples, will feel these climate change impacts first and most intensely. Indigenous peoples live with fluctuations in weather and climatic conditions. Experiencing, understanding and relating to year-to-year changes in weather, ice and snow patterns, animal behavior and movement, and in hunting and fishing conditions is part of life in the Arctic. Yet the trends currently being observed give concern over major, irreversible impacts on indigenous communities and livelihoods. Indigenous peoples of the Arctic must be given information regarding the possible effects of global warming and the changes projected for the Arctic environment and what it may mean for cultural, social, political, economic, and spiritual activities of the indigenous peoples of the Arctic.

The indigenous peoples of the Arctic include the Inupiat, Yup'it, Aleut and Athabaskan peoples of Alaska; the Inuit, Inuvialuit, Athabaskans and Dene of northern Canada; the Kalaallit and Inughuit of Greenland; the Saami of Fennoscandia and Russia's Kola peninsula; and the Chukchi, Yup'it, Even, Evenk, Nenets, Nivkhi and Yukaghir and many other peoples of the Russian Far North and Siberia. Arctic peoples have depended for millennia on the living resources of land and sea, as hunters, fishers and reindeer herders. Today, many indigenous communities across the Arctic continue to depend largely on harvesting and using living terrestrial, marine and freshwater resources, combining informal and formal economies. Harvested resources are used as food, provide material for traditional clothing and other products, and also figure prominently in the cash-economy of local households and communities.

Indigenous peoples maintain a strong connection to the Arctic environment which provides them with the economic and nutritional bases for survival, but is also very important for social identity, cultural survival and spiritual life. Climate change impacts the traditional harvesting activities of indigenous peoples. Rapid weather changes and occurrence of thin ice and severe weather conditions (e.g. strong winds and storms) makes hunting more dangerous. Furthermore, disappearing sea ice affects many species that are subject to harvest, for instance polar bears, seals, whales and some fish stocks depend on ice cover. As a result, the livelihoods connected with hunting, fishing and herding are under threat. Additionally, housing, infrastructure and transport connections of coastal indigenous communities are seriously affected by climate changes, with rising maintenance costs and sometimes even the necessity of relocation.

Present permanent settlements have elaborate infrastructure and costs of resettlement are high.<sup>1</sup> Moreover, relocation results in social problems and deepening of cultural loss. In such cases, traditional knowledge, anchored in geographical areas, can not be applied any longer and therefore may be lost.<sup>2</sup>

Indigenous peoples could be supported to face the changes in several ways. Further empowerment, revised legislations and regulations and financial support by the respective states as well as modern technology and sufficient information on issues such as health risks may play important roles in assisting indigenous peoples adapt to the changing environment. Additionally, as the physical environment of the Arctic continues to change due to global warming the indigenous peoples of the Arctic will need to strengthen their languages, music, art, and literature to help maintain a healthy identity.

Indigenous peoples are increasingly diversifying their economies by engaging in industrial activities, for example through involvement in industrial fishing and oil and gas development. In some cases this involvement has benefitted communities and regions to a large extent, in other cases the results have not met the economic, social and cultural expectations. The major part of indigenous communities have strategies that emphasize the involvement in a number of different social, cultural and economic spheres which affect family organization, employment training and school curriculum to mention but three examples. Today this industrial involvement is one of the drivers in Arctic communities and is an integral part of any climate change adaptation strategy.

## Analysis of Policy Shortcomings

Although significant progress has been made in developing integrated approaches to policy in the Arctic marine environment, and while land claims and forms of self-government have granted some indigenous peoples specific degrees of autonomy, and circumpolar fora such as the Arctic Council have recognized the importance of involving the peoples of the Arctic, the voices, concerns and perspectives of indigenous peoples are still often muted and ignored.

Indigenous peoples also remain, in many cases, excluded from actual policy discussion and decision-making. International opposition over hunting marine mammals, for example, persists, and the issues surrounding traditional and contemporary practices of hunting seals, whales, walrus, harbour porpoise, polar bears and other marine mammals are almost impossible to get on the agenda of the Arctic Council and its various working groups. This raises the question of the effectiveness of the Arctic Council if it is not prepared to discuss issues of controversy, such as animal-rights activities, the impact of the US Marine Mammal Protection Act, or the recent decision by the US to list the polar bear as endangered throughout its range.

Discussion of climate change adaptation policy in the marine environment is based on the reliability of science, yet there are shortcomings in scientific models and scenarios. For example, modelling for the complexity of social and economic life is a significant limitation for climate change science and subsequent policy options. Additionally, research findings are often not communicated to indigenous communities in an effective locally-relevant and accessible manner, resulting in a knowledge gap concerning changing Arctic conditions among indigenous peoples. Likewise, the lack of communication also means that scientists are not aware if the needs and concerns of indigenous communities have been addressed.

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<sup>1</sup> Estimates show that relocation of one village (here example of Kivalina, Alaska) may cost up to 54 mln USD (IPCC, 2007, p. 675). Furthermore, virtual costs also include loss of invested resources in the area from which community is resettled.

<sup>2</sup> ACIA, 2005, pp. 92, 664; AHDR, 2004, p. 57, IPCC, 2007, pp. 672, 675.

Climate change is seldom analysed and understood in the context of other changes and stressors that have more immediate impacts on indigenous communities and livelihoods. Because of the interdependence between Arctic economies and global markets, indigenous peoples are multiply exposed -- to climate change, to changes caused by the global processes affecting markets, technologies and public policies, as well as to local and regional political and economic situations. These changes are also resulting in shifting gender roles and changing family dynamics, which will also require consideration when formulating policy options. Lack of sophisticated and nuanced analysis also limits policy options.

How do different states define marine resources and the marine environment? How do these definitions converge with or diverge from indigenous understandings and perspective?

The melting ice makes the Arctic accessible for expanding fisheries, oil and gas development, mineral exploration, shipping (the North West Passage / Northern Sea Route), tourism and military presence. This increased accessibility has already made sovereignty, territorial claims, military control, pollution prevention and control measures as well as rescue operations appear on international and national agendas. The application for observer status in the Arctic Council by China is but one example of the increased international interest in a more accessible Arctic. These activities have to be related to indigenous peoples for example with respect to security and health matters as well as land right and their possibilities to participate in the relevant political scenes and benefit from economic endeavours.

Commercial fishing is increasing in several regions of the Arctic marine environment, yet little has been done internationally to prepare for this. At the same time, indigenous communities in Alaska and Greenland have long been involved in commercial fisheries, and communities in Canada's Nunavut are beginning to develop new fisheries. What kinds of implications will there be for indigenous communities wishing to harvest Arctic fisheries given the globalized and intensely competitive nature of the fishing industry?

## Key Policy Options

**We recommend** that viable policy options begin by recognizing the needs, perspectives and perceptions of local people and local communities, and of the importance of families and households, and other forms of close social association, as foundations for sustainable livelihoods and sustainable communities. Successful policy options also require the understanding of the diversity of gendered and generational forms of knowledge including the efficacy and application of traditional knowledge.

**We recommend that,** where appropriate and where possible, research conducted in the Arctic be community-based, or at least be designed with due consideration of the needs and concerns of local residents, and follow the participatory principle. Whenever possible, research must be holistic, build on community-based initiatives, and create partnerships between researchers and communities. In designing research projects, the question “Have the concerns of indigenous peoples and local communities been addressed?” must be asked.

**We recommend that** discussions on policy options should be informed of the diversity of understandings and misunderstandings of adaptation (in the same way we know that ‘sustainable development’ means different things) in the many diverse cultural settings around the circumpolar North. If a common definition of ‘adaptation’ for policy purposes is applied universally, what consequences might there be for the diversity of Arctic marine communities? Do policy-makers have a good understanding of the cultural dimensions and often contested meanings that surround ‘adaptation’? Does ‘adaptation’, for instance, mean the same thing for a Yup’ik fishing family, or an Inupiat whaling crew, as it does for Greenlanders who work on large fishing vessels in the Barents Sea, or for a Saami household in northern Norway dependent on salmon for its main income? And even within the same region, there may be profound

differences. For example, a Saami salmon fishing household may have difference understandings of adaptation than a neighbouring Saami reindeer herding household. Understanding this diversity of meaning is a prerequisite for discussion about how to increase adaptive capacity.

**We recommend** that policy options should go beyond involving indigenous peoples as stakeholders in discussions to routinely recognising their position as rights holders, given their history and connection to the lands and resources in the Arctic. Indigenous peoples' social, cultural and economic aspirations should be integrated into the policymaking process. For example, how do current national and international policies limit the options of indigenous communities to develop economic activities, business, and domestic and international markets based on marine resources?

**We recommend** that the commercial industries benefiting from Arctic resources set up an Arctic Trust Fund that will counterbalance some of the risks that their activities create. The fund could be used for adaptation activities such as relocation, training, education, etc.

**We recommend** the setting up of a Climate Change Impact Assessment Working Group under the Arctic Council to investigate the present and future social, cultural and economic consequences of proposed adaptation strategies. Many well-meaning projects to help Arctic communities to adapt to climate change may in fact severely hit the life-nerve of the societies and change the structure and dynamics of regions, communities and families in unintended, unfortunate and unforeseen directions.

**We recommend** the setting up of an Indigenous Rights Review Working Group under the Arctic Council to analyse the legal and institutional barriers to adaptation as an urgent requirement. The working group should help focus policy-relevant discussions on what constrains, hinders and prevents indigenous peoples from 'adapting' to climate change. With the possible exception of some successful co-management initiatives in Alaska, it is difficult to identify specific policy areas which have the potential to support adaptation in the Arctic marine environment and will have positive consequences for indigenous peoples. In what ways, for example, do regulatory regimes, marine resource management practices and quota systems imposed by states and federal and provincial agencies increasingly affect hunting, fishing and herding? How far do wildlife management regimes allow for institutional flexibility? For some peoples of the Arctic, the political and management systems are already in place that could assess the impacts of climate change, allow local and regional governments to act on policy recommendations to deal with the consequences, and improve the chances for indigenous peoples to deal successfully with climate change. Analysis of the various forms of land claims processes, self-government, and self-governance in the Arctic would be necessary for informing key policy options. And what kind of changes should be made to the existing land claims agreements in order to adjust to a changing environment.