

Scoping Study Summary: International assessment of the value of Indigenous Knowledge to improve resilience to environmental change (Arctic region).

There were two main aims of this scoping study: (1) to provide an up to date survey of the current use of Indigenous Knowledge for building resilience to environmental change; and (2) to assess whether some of these strategies might be transferable by bringing together key stakeholders from different regions to share their experiences and management approaches. A summary of the outcomes of the longer report follows. For further information please check: sharingknowledge.net.au

1) Indigenous Knowledge continues to guide Arctic communities in many aspects of their daily lives, including their responses to climate change. Social and environmental change, however, threaten to undermine the transmission of that knowledge and also some aspects of its applicability. Greater attention to promoting the transmission of IK is needed, and can build on examples such as the nomadic school established by the Chukchi people in the Russian Far East, or the “land camps” that are run in Arctic Canada and Alaska. The use of IK at an institutional (in addition to individual) level can also be further developed.

To place the adaptation of IK in context, the Arctic has always been characterized by variability and change. The extremes of seasons are simply the most regular and obvious variation to which indigenous peoples have had to adapt. On other, less regular time scales, the abundance of fish and animals can vary greatly, causing shifts in hunting and fishing patterns and strategies. More recently, substantial changes in climatic variables in the Arctic have created environmental conditions that are beyond ‘normal’ (recent historical) variation.

Indigenous peoples around the Arctic are well aware of these changes, having been among the first to notice many subtle signs of change. They are also well aware of the scientific and media attention to global warming, and as a result often interpret observed changes in the environment and wildlife as the latest manifestation of climate change. One observation in particular has come up again and again, from region after region, in several independent studies of indigenous observations: the weather is changing, and traditional ways of predicting the weather no longer work.

Scientific research in the Arctic has been extensive, confirming that major changes are taking place in nearly all parts of the environment. The *Arctic Climate Impact Assessment*, published in 2005, provides a comprehensive summary of what is known about climate change impacts in the region (and includes a chapter on indigenous perspectives).

In Alaska as elsewhere, IK has been used primarily and predominantly by those who generate and hold this knowledge as a means of conducting their normal daily lives. In other words, IK continues to be a living, vital form of knowledge and practice.

Numerous examples of how IK is supporting current adaptations exist in Canadian Arctic communities. Predominantly they are related to supporting changes in hunting and traveling behaviours, survival skills, or the management of wildlife resources.

The context in which Indigenous Knowledge is used by the Saami for adaptation varies in the four countries in which they live. Climate change is perceived to be a threat but is only one among many – other changes imposed on the Saami remain perhaps of higher priority and concern than changes in the weather. Saami are nonetheless aware of the capacity and limits of their existence to be able to adapt in a rapidly changing world.

In Alaska, where IK has gained visibility and respect as a valid and reliable source of information, the next step is to determine how it can best be used to facilitate adaptation. Documentation of local management and adaptation practices would be useful to demonstrate that IK has applications beyond using its insights in governmental management regimes or academic research. Further studies could look at the constraints on adaptation in various areas, to see where adaptation requires more information and where it requires the ability to use available information (much of which is likely to come from IK) where that information cannot be acted upon today due to regulatory, social, economic, or other constraints. In addition to studies, more work is needed to help IK holders share their experiences with one another, within Alaska and beyond.

Significant value exists in efforts towards the formalization of traditional learning processes to compensate for the existing erosion or breakdown of these process and links in Canadian Arctic communities. For example, the establishment of “land camps” for the transmission of traditional knowledge and skills to youth may prove very valuable in transferring skills and knowledge for adaptation in the future as more and more youth continue to spend increasing amounts of time in community and less on the land, as a result of wage earning employment, and other socio-economic and cultural trends in Canadian Arctic regions.

In 2002, the Chukchi nomadic community of Nutendli, located on the northeast bank of the Lower Kolyma River in the Republic of Sakha-Yakutia, Russia, created a nomadic school for their peoples. The establishment of this school is a historic attempt for self-preservation of the key areas of the Chukchi civilization and knowledge, in a context where the continuous permafrost is melting around them. Such initiatives, initiated by the communities own desire to stay on the land, should be recognized and supported by all possible means, allowing for self control of the indigenous communities over the projects rather than management and interference from outside.

2) Arctic communities have already found value in exchanging information and adaptation strategies within the region. Expanding the dialogue to include other regions of the world will allow Arctic peoples to share their experiences of using IK and to learn about other efforts to use IK at an institutional level. Most respondents were enthusiastic about taking part in an international event of some kind. There were also, however, some concerns about what such an event would entail and what implications it would have. First, people wanted to be sure that the event would be relevant to individuals and communities (e.g., sharing stories among practitioners, or creating networking opportunities) rather than addressing only large-scale topics such as regional governance or what-if scenarios. Second, particularly from Russia, there was concern over the potential for a backlash against participants in such an event, due to conflicts between indigenous peoples and those in power.

The responses from Alaska indicate strong interest in an international event. One respondent said, “I would be interested to know how governments or NGOs [elsewhere] support a community or indigenous group’s adaptation choices.” Others indicated interest in sharing information, learning from experiences elsewhere, and generally raising the profile of community adaptation capacity, whether related to IK or not. As people are beginning to address the question of adaptation, information from people in similar circumstances will be especially helpful in demonstrating the range of options and ideas, or at least common concerns and the need for developing new options and ideas.

The responses did not show a preference for a single event over multiple events. That said, a single international event would provide exposure to a greater range of ideas and provide a higher profile than a series of regional events. Having the ability to get together again a year or two later might be even more useful as people can try out the ideas they learned and then share their new experiences. It will important to have a substantial number of people from communities, so they can share direct, on-the-ground experiences and have greater confidence that they are learning from proven experiences rather than untested ideas.

Canadian Indigenous organization representatives and University researchers were, in general, positive that an event of international scale would be helpful and interesting. Some of the rationale given for this interest and support included the growing interest among communities for training and network building opportunities on these topics, the increased interest and attention being given to resilience and adaptive capacity, rather than solely an 'impact assessment approach' predicting where negative things "might" happen, and the positive context which a resilience focused approach brings to looking at and addressing community challenges with environmental change and variability. Finally, a few of the respondents noted the importance of identifying and working with the common issues among Indigenous peoples worldwide in the content of climate change, as many had experienced this recognition (the similarities among Indigenous communities and people in these circumstances) regardless of geographic location.

Some caution was also given to be aware of not duplicating ongoing complementary initiatives in this field if/when planning such an event. Another suggestion raised for the initiative was the development of a small working group tasked with comparative analysis of climate change, vulnerability, adaptation and resilience experiences between Indigenous communities in different contexts around the world. The unanimous suggestion re: content, was to focus such an event more on practice and lessons learned than theory and research.

For Russia, respondents wanted to know what changes will come if people participate, as the political and social context of indigenous issues is already very difficult (furthermore, intervention of a foreign organization will trigger responses from the power structure so that local indigenous peoples suffer a backlash from their participation). Concerns over a new initiative (in addition to existing) were raised as well as the need to identify who sets the focus, aims and agenda of the initiative. Finally questions were raised about what the benefits of participation might be for local community people who do not get their voices heard in the international level (reindeer herders, women, hunters, fishermen) but who are at the front lines of facing these changes.