

United Nations Educational, Scientific and Cultural Organization

> Organisation des Nations Unies pour l'éducation, la science et la culture

International Experts Meeting

Climate Change and Arctic Sustainable Development : scientific, social, cultural and educational challenges

3-6 March 2009, Monaco

ABSTRACT: OCEANS, ICE AND ATMOSPHERE

Lene Kielsen Holm

Director of International Sustainable Development, Inuit Circumpolar Council (ICC), GREENLAND

Siku-Inuit-Hila, "The Dynamics of Human-Sea Ice Relationships: Comparing Changing Environments in Alaska, Nunavut and Greenland"

Henry P. Huntington, Shari Gearheard, Andy Mahoney, Lene Kielsen Holm, Yvon Csonka, Ilkoo Angutikjuak, Toku Oshima, Warren Matumeak, Joelie Sanguya, Igah Sanguya, Geela Tigullaraq, Mamarut Kristiansen, Qaerngaaq Nielsen, Joe Leavitt, Nancy Leavitt, Roger Barry

The Siku-Inuit-Hila (Sea Ice-People-Weather) project involves Inuit, Inughuit, and Iñupiat from Kangiqtugaapik (Nunavut), Qaanaaq (Greenland), and Utqiagvik (Alaska), respectively, along with academic researchers from several institutions in these three countries. The project has three major components.

The first component includes a series of "sea ice knowledge exchanges," visits by all participants (residents of all three communities plus the visiting researchers) to each of the study locations for participant observation. During these trips, the emphasis is on travelling the sea ice together. The sea ice itself acts as the common denominator for the participating hunters and elders from different communities and scientists from different disciplines. The host community leads each visit, allowing the visiting team members to experience local hunting and travel techniques and to exchange knowledge about diverse issues such as tools, clothing, food, and navigation.

The second component involves regular meetings of sea ice experts in each community. Led by local team members of Siku-Inuit-Hila, these working groups provide an opportunity to assess current sea ice conditions throughout the sea ice season and to document local knowledge of sea ice, ranging from traditional stories and mythology of sea ice, to sea ice terminology, to extreme events, to strategies for hunting and travelling in different sea ice environments.

The last component involves the establishment of a sea ice monitoring network in the three communities. Trained by the project's sea ice physicist and supported by a handbook created especially for the local monitors, local technicians measure physical properties of sea ice and snow on a weekly basis at 2 to 4 stations installed at each community. Local sea ice experts chose the location of the stations according to key areas of importance for sea ice use. In combination with local historical records, available climate data, and local knowledge, the data from the observing network provides detailed information about local and regional sea ice processes.

The different components of the project are tied together in a number of ways. Team members from the different regions have held workshops with elders and other knowledgeable persons in their respective areas. In these workshops they have been discussing sea ice and climate change issues, mapping changes, documenting related language/terminology, and talking about how recent climate and environmental changes have influenced their everyday lives. The data collected from these meetings are being incorporated into the work of Siku-Inuit-Hila, as is data collected from sea ice measurement instruments in these three arctic regions. Sea ice monitoring is part of the project and the instruments are maintained by local people in the partner communities. The outcome of Siku-Inuit-Hila is first and foremost the meetings and exchanges between and among the hunters and scientists, and a book that is projected to be launched in 2010.

Recommendations:

- Wherever it is possible I recommend aiming to involve local people with their knowledge and local ideas, so that they become part of the research plan and outcome/s.
- At least local authorities should be informed about research projects that are to be conducted.
- The knowledge gained from research projects should be disseminated in the local language/s.