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The PISUNA project: Protecting biodiversity and creating multiple benefits for local communities in Greenland

The environment of Greenland is rapidly changing. The extent of sea-ice and snow cover is increasingly unpredictable. Many species are changing their distribution patterns and alien, potentially invasive, species are turning up.

Adapting the livelihoods of the indigenous hunter and fisher communities to the changed environment while at the same time ensuring protection and sustainable use of the goods and benefits provided by the Arctic ecosystems is a daunting challenge. The Pisuna¹ project aims to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland; to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor and use natural resources; and to pilot innovative bottom-up approaches to natural resource management among local communities and the government.



¹ Pisuna stands for "Piniakkanik Sumiiffinni Nalunaarsuineq" which is the Greenlandic name of the scheme

Project description

The climate is changing and the people in the Arctic are facing huge challenges as many rely on natural resources for both subsistence and income. Successful adaptation to climate change and the sustainable use of resources requires observation of the environment.

Scientific knowledge of the environment is incomplete and conventional scientific monitoring is logistically difficult. Local fishers and hunters observe the environment all year round. Their observations and knowledge are, however, not consistently quantified, analyzed or used for resource management.

Greenland Government and European Commission are partners in a new initiative to pilot-test and institutionalize a simple, field-based scheme for monitoring and management of resources developed specifically to enable Greenlandic fishers and hunters themselves to follow trends in living resources and to propose management decisions.

Since 2009, the Government of Greenland has collaborated with communities in Disko Bay and Uummannaq Fiord of NW Greenland to pilot the use of community-based natural resource monitoring as a tool for improving biodiversity conservation and sustainable resource management. This preliminary experience suggests that there is great interest among rural hunters and fishers in participating in the scheme. The scheme leads to natural resource management actions that are based on community members' own observations and knowledge. There is correspondence between community members' perceptions and professional scientists' assessments of trends in the abundance of several resources, suggesting that community-based monitoring can complement scientist-executed monitoring. Community-based monitoring can pin-point particular species and areas that are in need of more attention and, at the same time, it can help link observed environmental changes to management action.¹

Project goal and objectives

The government would like to scale up this initiative technically and organisationally so that community biodiversity monitoring goes beyond a critical point in terms of policy support, implementation standards, government capacity and number of communities involved, at which point this scheme will be able to continue across the country with minimal further external assistance.

The objectives of the project are (i) to enhance the protection and sustainable management of marine and terrestrial resources on the part of local communities in Greenland; (ii) to strengthen the human and organisational capacity of Greenland's communities and the government to sustainably protect, manage, monitor



and use natural resources; and (iii) to pilot innovative bottom-up approaches to natural resource management among local communities and the government. The project will be carried out over a three-year period by the government, in collaboration with stakeholders at local, national and international level.

The project is well in line with the core objectives of 'BEST'. The project promotes conservation and sustainable use of biodiversity and ecosystem services and focuses on coastal areas at the interface between terrestrial and marine ecosystems. The project balances conservation and development needs, takes existing conservation mechanisms and tools into account, and is based on local commitment among Greenland's communities and government.

The project helps implement sustainable management of the marine and terrestrial resources that contribute to protecting important species, habitats and ecosystem functions outside of protected areas. Likewise, the project contributes to maintaining healthy, resilient ecosystems and to fostering holistic, ecosystem-based approaches to climate change adaptation.

The project strengthens capacities on a local, sub-national and national scale. It promotes exchange of information and good practice on community biodiversity monitoring and management amongst key stakeholders, including local administration, civil society, researchers and the private sector. It strengthens existing natural resource management programmes, broadens the knowledge base and helps fill the knowledge gaps on effective institutionalisation of mechanisms to promote natural resource management action.

¹ This is extracted from: Danielsen, F., E. Topp-Jørgensen, N. Levermann, P. Lovstrøm, M. Schiøtz, M. Enghoff, P. Jakobsen. Counting what counts: using local knowledge to improve Arctic resource management. *Polar Geography* 37, 69-91 (2014), available at www.tandfonline.com/doi/abs/10.1080/1088937X.2014.890960#.U1fi-OZ_tFw

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