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– The programme will create knowledge and develop practical recommendations that can facilitate a sustainable, cooperative and peaceful development in the Arctic.

Programme Director Sofia Rickberg

## Mistra Arctic Futures

### WHAT IS THE CHALLENGE?

The Arctic and its people are facing major changes. Global warming is already dramatically affecting the Arctic, where signs of other environmental impacts are also clear. New technological developments are expected to

**»Research on the Arctic is important for enabling decision makers in the Arctic countries to address the challenges of this dynamic region with well-informed decisions.«**

Gustaf Lind, Sweden's Ambassador for the Arctic and Chair of the Arctic Council, Swedish Foreign Ministry

further increase man's direct impacts on the region. Sweden – an Arctic country and one of the eight members of the Arctic Council – bears important responsibilities for international collaboration on the future of the Arctic. In addition, Sweden, like all other Arctic countries, must adapt and actively address the changes that are underway, both regionally and locally.

Environmental change in the Arctic leads to both dangers and possibilities. In the wake of these lie socio-economic changes and new political ambitions. The consequences can

be of widely varying character, running the full range from local to international levels. Natural resources that were once deemed impossible to access are now potential assets, causing increasing focus of attention on geo-political questions. Shrinking sea ice creates new potential transportation routes for shipping. This development is of great economic and political interest, not only to the Arctic countries but to countries outside the Arctic region as well. At the same time, people and organizations from around the world want to protect the Arctic landscape, animals and nature.

### HOW CAN THE PROGRAMME CONTRIBUTE TO A SOLUTION?

These new conditions in the Arctic require society to stand ready for new and varied challenges. A broad and strong knowledge base, powerful and flexible tools, and insightful dialogue between many different stakeholders are required. This is where a programmatic investment like Arctic Futures can contribute, by showing how society can act and respond to new conditions in the Arctic.

Arctic Futures in a Global Context is an interdisciplinary and social-science-oriented research programme with five distinct research projects that will contribute to strengthening the knowledge base on questions of particular relevance for development in the Arctic but with global relevance as well. Some of the re-

search projects focus on the Arctic region in Sweden, while others are of an overarching international character. The researchers' and programme's collective national and international networks provide a strong and well-aimed reinforcement of Swedish social science Arctic research.

Collecting critical social-science research on the Arctic under a common programme creates unique possibilities to further develop and reach out with knowledge sought by society at large and its decision makers. Communicating the research and results also contributes to raising future research questions.

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Financing:  
**Mistra is investing 38 million Swedish Crowns**

Programme host:  
**The Swedish Polar Research Secretariat**

Programme Director:  
**Cecilia Dahlberg**

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**<http://www.polar.se/arcticfutures>**



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## The projects in the programme

**Carina Keskitalo, Department of Social and Economic Geography, Umeå University**

The project Pre-paring for and responding to disturbance: Arctic lessons for Sweden takes its departure in that both climatic and socio-economic changes strongly influence the Arctic region. The Swedish part of the Arctic is largely comprised of boreal forest, including industries such as forestry and significant infrastructure. As a result of climate change and globalization, both economic changes and disruptions resulting from storms, flooding and forest insect pests may increase. This will have implications both for industry and the public sector.

Within this research project we are evaluating how these different types of disruption – both in the socio-economic sphere and in relation to climate change – may influence the northern regions of Sweden. Researchers in the project are in particular analyzing the development of policy and crisis preparedness in response to events that have already taken place, both in Sweden and, comparatively, other Arctic countries, and how preparedness could be strengthened.

Aiming to improve the knowledge base in support of policy development and to increase society's ability to respond to future change, the study is being carried out in collaboration with project partners at the University of Saskatchewan in Saskatoon, Canada, and the University of Lapland in Rovaniemi, Finland.

**Tore Söderqvist and Gerda Kinell, Envenco Environmental Economics Consultancy Ltd., Stockholm**

Stakeholder dispute in the Arctic is expected to increase as a result of the growing pressure to exploit a range of natural resources, due to their increasing accessibility. The challenge is to find compromises that are compatible with sustainable development. In the project Arctic Games, an interdisciplinary framework is being developed that combines game theory,

theories on governance of natural resources, and environmental economics for the purpose of evaluating governance options for the Arctic's future. This international project is also strengthening Swedish Arctic research through the participation of doctoral students and researchers at Swedish universities.

The project is being carried out in collaboration with: the Centre for Economic and Financial Research at the New Economic School in Moscow; the Division of Environmental Strategies Research at the Royal Institute of Technology in Stockholm; the Northern Research Institute, in Tromsø; the Department of Economics at Stockholm University; and the University of Nordland in Bodø.

**Sverker Sörlin and Nina Wormbs, the Division of History of Science and Technology, KTH, Stockholm**

The debate about the future of the Arctic is currently heated, but not for the first time. Descriptions of the future of the Arctic – often enthusiastic but at times foreboding – were formulated during the entire 20th Century. The questions raised in this project explore the people behind these descriptions, and how the descriptions were formulated, against a background of contemporary political, economic, scientific and ideological contexts.

We are interested in the voices of the local population. Who's interest had the most influence during different historical periods, and what can different people mean by "positive" development in the Arctic? The researchers hope that, by applying methods from different disciplines (such as ethical technology assessment, environmental impact assessment, and scenario analysis) they can contribute to expanding the discussion about the future of the Arctic from a question about power to one that also addresses who's values are counted and who's voices have a right to be heard. They also aim to contribute to different fu-

tures being evaluated before they take place.

The project is being carried out in collaboration with the European University Institute in St. Petersburg and the Stockholm Environment Institute.

**Dieter K. Müller, Department of Social and Economic Geography, Umeå University**

Tourism is an important but controversial industry in the northern regions. The aim of the project From Resource Hinterland to Global Pleasure Periphery is to analyze the role of tourism in sustainable development of Arctic and sub-Arctic communities. Tourism is seen in this context as an innovation system that can contribute to employment but also to giving value to protected areas. An important task within the project is, therefore, to identify problems that hinder positive development. To do so, the Arctic region in Sweden is being compared with the Yukon in Canada and Nenets Autonomous Region in Russia.

The project is being carried out in collaboration with Umeå University and Dalarna University.

**Neil Melvin and Linda Jakobson, (SIPRI), Stockholm and Beijing**

Increasing accessibility to the Arctic is presenting new opportunities. Critical to the opening of the Arctic will be fashioning political and security arrangements to manage the transformation of the region in peaceful and cooperative ways. SIPRI's project, 'Arctic Futures: managing competition and promoting cooperation' will examine the challenges emerging around these key issues. What implications does the opening of the Arctic have for European security and for existing regional governance frameworks? How should the interests of Arctic and non-Arctic states be balanced? The project will produce policy relevant research and build new Arctic expertise in Sweden and abroad.